



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC  
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0302

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Price Industries Limited

Manufacturer's Technical Representative: Chris Hildebrand

Mailing Address: 638 Raleigh Street, Winnipeg, MB R2K3Z9

Telephone: (204) 669-4220

Email: ChrisHi@priceindustries.com

Product Information

Product Name: Air Conditioning Units

Product Type: Air Conditioning Units - Inline Fan and Terminal

Product Model Number: See attachments

General Description: Single duct terminal units, chilled beams and fan filter units.

Mounting Description: See Certified Product Tables, Suspended

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: DCL Labs

Contact Person: Kelly Laplace

Mailing Address: 1315 Greg St, Ste 109, Sparks, NV 89431

Telephone: (775) 358-5085

Email: kelly@shaketest.com

Title: Business Manager





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

**California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)**

Company Name: THE VMC GROUP

Name: Kenneth Tarlow

California License Number: S2851

Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814

Telephone: (832) 627-2214

Email: ken.tarlow@thevmcgroup.com

**Certification Method**

☐ GR-63-Core

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): \_\_\_\_\_

**Testing Laboratory**

Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)

Contact Person: Josh Sailer

Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431

Telephone: (775) 358-5085

Email: josh@shaketest.com



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
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**Seismic Parameters**

Design Basis of Equipment or Components ( $F_p/W_p$ ) = See attachments

$S_Ds$  (Design spectral response acceleration at short period, g) = See attachments

$a_p$  (Amplification factor) = 2.5

$R_p$  (Response modification factor) = 2.5 (w/ spring isolators); 6.0 (w/out spring isolators)

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

$z/h$  (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

**OSHPD Approval (For Office Use Only) - Approval Expires on 12/31/2025**

Date: 9/2/2021

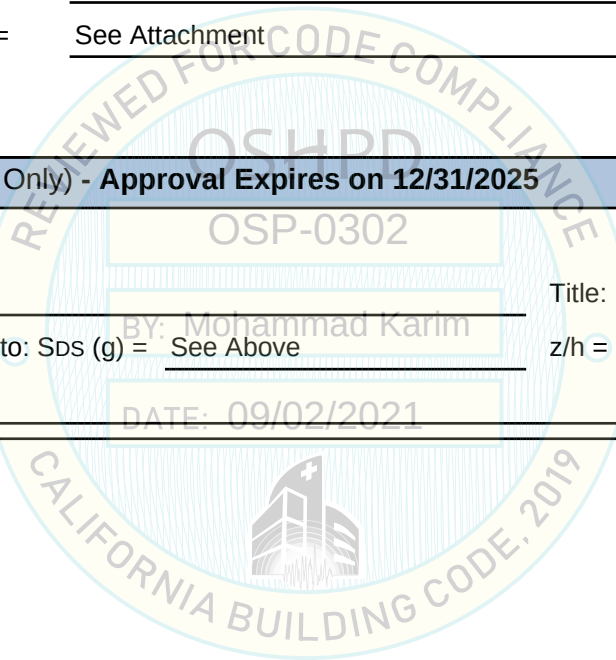
Name: Mohammad Karim

Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to:  $S_Ds$  (g) = See Above

$z/h$  = 1

Condition of Approval (if applicable):



# Special Seismic Certification

## Certified Components: SDV / SDVQ



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 1**

**Product Line:** Air handling units -- Terminal Units SDV / SDVQ

**Mounting Description:** Ceiling suspended (with or without spring isolators)

**Seismic Certification Limits:** Sds = 2.50 g at z/h=1.0 (Fp/Wp = 1.88 or 4.50)

**Notes:** Cabinet construction is zinc coated carbon steel; silencer is 3', 5', elbow or none

| New Model Number <sup>1</sup> | Old Model Number              | Cabinet Dimensions (in)     |        |       |        | Max. Weight (lb) | Unit         |
|-------------------------------|-------------------------------|-----------------------------|--------|-------|--------|------------------|--------------|
|                               |                               | Length w/<br>Access Section | Length | Width | Height |                  |              |
| SDV / SDVQ Sz 4               | SDV / SDVQ 5xxx/8xxx Sz 4     | 32 1/2                      | 22 1/8 | 12    | 8      | 33               | UUT1         |
| SDV / SDVQ Sz 4               | SDV / SDVQ 5xxx/8xxx Sz 4     | 32 1/2                      | 22 1/8 | 12    | 8      | 60               | UUT15A       |
| SDV / SDVQ Sz 4               | SDV / SDVQ 5xxx/8xxx Sz 4     | 32 1/2                      | 22 1/8 | 12    | 8      | 60               | UUT15B       |
| SDV / SDVQ Sz 4               | SDV / SDVQ 5xxx/8xxx Sz 4     | N/A                         | 42 1/4 | 12    | 8      | 49               | UUT24A       |
| SDV / SDVQ Sz 4               | SDV / SDVQ 5xxx/8xxx Sz 4     | N/A                         | 42 1/4 | 12    | 8      | 49               | UUT24B       |
| SDV / SDVQ Sz 5               | SDV / SDVQ 5xxx/8xxx Sz 5     | 32 1/2                      | 22 1/8 | 12    | 8      | 33 to 177        | Interpolated |
| SDV / SDVQ Sz 6               | SDV / SDVQ 5xxx/8xxx Sz 6     | 32 1/2                      | 20 1/8 | 12    | 8      |                  | Interpolated |
| SDV / SDVQ Sz 7               | SDV / SDVQ 5xxx/8xxx Sz 7     | 32 1/2                      | 20 1/8 | 12    | 10     |                  | Interpolated |
| SDV / SDVQ Sz 8               | SDV / SDVQ 5xxx/8xxx Sz 8     | 32 1/2                      | 20 1/8 | 12    | 10     |                  | Interpolated |
| SDV / SDVQ Sz 9               | SDV / SDVQ 5xxx/8xxx Sz 9     | 32 1/2                      | 20 1/8 | 14    | 12 1/2 |                  | Interpolated |
| SDV / SDVQ Sz 10              | SDV / SDVQ 5xxx/8xxx Sz 10    | 32 1/2                      | 20 1/8 | 14    | 12 1/2 |                  | Interpolated |
| SDV / SDVQ Sz 12              | SDV / SDVQ 5xxx/8xxx Sz 12    | 32 1/2                      | 20 1/8 | 16    | 15     |                  | Interpolated |
| SDV / SDVQ Sz 14              | SDV / SDVQ 5xxx/8xxx Sz 14    | 35 5/8                      | 23 5/8 | 20    | 17 1/2 |                  | Interpolated |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 81               | UUT2         |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13A       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13B       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13C       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13D       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT18A       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13E       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13F       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13G       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT13H       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT14A       |
| SDV / SDVQ Sz 16              | SDV / SDVQ 5xxx/8xxx Sz 16    | 35 5/8                      | 23 5/8 | 24    | 18     | 177              | UUT18B       |
| SDV / SDVQ Sz 24x16           | SDV / SDVQ 5xxx/8xxx Sz 24x16 | 31                          | 19     | 38    | 18     | 260              | UUT12B       |
| SDV / SDVQ Sz 24x16           | SDV / SDVQ 5xxx/8xxx Sz 24x16 | 31                          | 19     | 38    | 18     | 260              | UUT12C       |
| SDV / SDVQ Sz 24x16           | SDV / SDVQ 5xxx/8xxx Sz 24x16 | N/A                         | 38 1/2 | 38    | 18     | 340              | UUT25A       |
| SDV / SDVQ Sz 24x16           | SDV / SDVQ 5xxx/8xxx Sz 24x16 | N/A                         | 38 1/2 | 38    | 18     | 340              | UUT25B       |

Notes:

1. SDVQ is an SDV with housing extension including optional access door section.



## Special Seismic Certification

**Certified Components: ACBL, ACBL HE, ACBM HE, ACBH**



**DCL Project No. 21854-2001**

**Manufacturer:** Price Industries Limited

**TABLE 2**

**Product Line:** Air handling units -- Chilled Beams: ACBL, ACBL HE, ACBM HE, ACBH

**Mounting Description:** Ceiling suspended (without spring isolators)

**Seismic Certification Limits:** Sds = 1.93 g at z/h=1.0 (Fp/Wp = 1.45)

**Notes:** Cabinet construction is powder coated carbon steel

| Model          | Cabinet Dimensions (in) |        |        | Max. Weight (lb) | Unit         |
|----------------|-------------------------|--------|--------|------------------|--------------|
|                | Length                  | Width  | Height |                  |              |
| ACBL 12x24     | 23 3/4                  | 11 3/4 | 10     | 19               | UUT3A        |
| ACBL 12x24     | 23 3/4                  | 11 3/4 | 10     | 21               | UUT3B        |
| ACBL 12x36     | 35 3/4                  | 11 3/4 | 10     | 19 to 100        | Interpolated |
| ACBL 12x48     | 47 3/4                  | 11 3/4 | 10     |                  | Interpolated |
| ACBL 12x60     | 59 3/4                  | 11 3/4 | 10     |                  | Interpolated |
| ACBL 12x72     | 71 3/4                  | 11 3/4 | 10     |                  | Interpolated |
| ACBL 12x84     | 83 3/4                  | 11 3/4 | 10     |                  | Interpolated |
| ACBL 12x96     | 95 3/4                  | 11 3/4 | 10     |                  | Interpolated |
| ACBL 12x108    | 107 3/4                 | 11 3/4 | 10     |                  | Interpolated |
| ACBL 12x120    | 119 3/4                 | 11 3/4 | 10     | 100              | UUT4B        |
| ACBL HE 24x24  | 23 3/4                  | 23 3/4 | 10     | 28               | UUT5A        |
| ACBL HE 24x24  | 23 3/4                  | 23 3/4 | 10     | 33               | UUT5B        |
| ACBL HE 24x24  | 23 3/4                  | 23 3/4 | 10     | 33               | UUT5C        |
| ACBL HE 24x36  | 35 3/4                  | 23 3/4 | 10     | 28 to 153        | Interpolated |
| ACBL HE 24x48  | 47 3/4                  | 23 3/4 | 10     |                  | Interpolated |
| ACBL HE 24x60  | 59 3/4                  | 23 3/4 | 10     |                  | Interpolated |
| ACBL HE 24x72  | 71 3/4                  | 23 3/4 | 10     |                  | Interpolated |
| ACBL HE 24x84  | 83 3/4                  | 23 3/4 | 10     |                  | Interpolated |
| ACBL HE 24x96  | 95 3/4                  | 23 3/4 | 10     |                  | Interpolated |
| ACBL HE 24x108 | 107 3/4                 | 23 3/4 | 10     |                  | Interpolated |
| ACBL HE 24x108 | 107 3/4                 | 23 3/4 | 10     | 153              | UUT22        |
| ACBL HE 24x120 | 119 3/4                 | 23 3/4 | 10     | 136              | UUT9B        |
| ACBL HE 24x120 | 119 3/4                 | 23 3/4 | 10     | 136              | UUT9A        |
| ACBL HE 24x120 | 119 3/4                 | 23 3/4 | 10     | 172              | UUT23        |
| ACBM HE 24x24  | 23 3/4                  | 23 3/4 | 12     | 32               | UUT10A       |
| ACBM HE 24x24  | 23 3/4                  | 23 3/4 | 12     | 32               | UUT10B       |
| ACBM HE 24x48  | 23 3/4                  | 47 3/4 | 12     | 32-107           | Interpolated |
| ACBM HE 48x24  | 47 3/4                  | 23 3/4 | 12     |                  | Interpolated |
| ACBM HE 48x48  | 47 3/4                  | 47 3/4 | 12     |                  | Interpolated |
| ACBM HE 24x72  | 71 3/4                  | 23 3/4 | 12     | 107              | UUT11B       |
| ACBM HE 24x72  | 71 3/4                  | 23 3/4 | 12     | 107              | UUT11D       |
| ACBH 48        | 48                      | 17     | 8      | 130              | UUT7B        |

# Special Seismic Certification

## Certified Components: FFU and FFU HE



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 3**

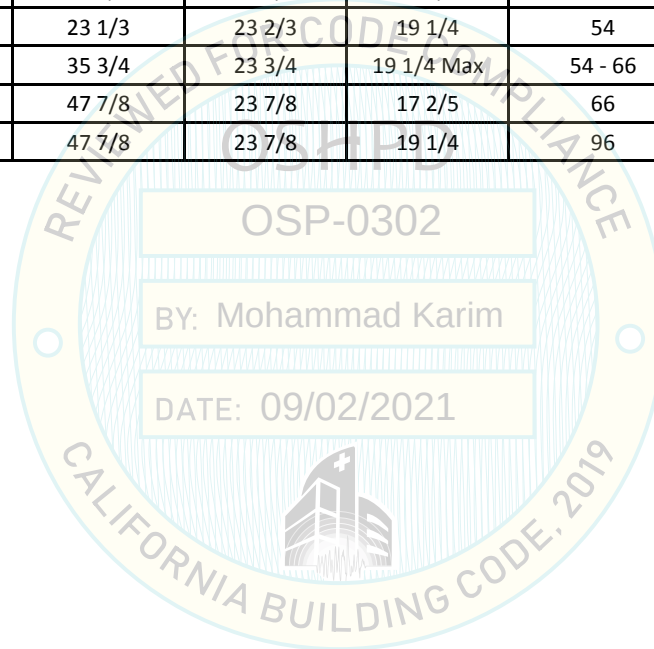
**Product Line:** Air handling units -- Fan Filter Units: FFU and FFU-HE

**Mounting Description:** Ceiling suspended (without spring isolators)

**Seismic Certification Limits:** Sds = 2.0 g at z/h=1.0 (Fp/Wp = 1.50)

**Notes:** Cabinet construction is Stainless steel, aluminum or painted aluminum, w/ 1" thick insulation

| Model        | Cabinet Dimensions (inches) |        |            | Weight (lb) | Unit         |
|--------------|-----------------------------|--------|------------|-------------|--------------|
|              | Length                      | Width  | Height     |             |              |
| FFU 2 x 2    | 23 3/4                      | 23 3/4 | 18 7/8     | 60          | UUT16        |
| FFU 2 x 3    | 35 3/4                      | 23 3/4 | 18 7/8 Max | 60 - 74     | Interpolated |
| FFU 2 x 4    | 47 3/4                      | 23 3/4 | 18 1/8     | 74          | UUT17        |
| FFU HE 2 x 2 | 23 1/3                      | 23 2/3 | 19 1/4     | 54          | UUT21        |
| FFU HE 2 x 3 | 35 3/4                      | 23 3/4 | 19 1/4 Max | 54 - 66     | Interpolated |
| FFU HE 2 x 4 | 47 7/8                      | 23 7/8 | 17 2/5     | 66          | UUT20        |
| FFU HE 2 x 4 | 47 7/8                      | 23 7/8 | 19 1/4     | 96          | UUT19A,B,C   |



# Special Seismic Certification

## Certified Subcomponents: SDV / SDVQ



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 4**

**Product Line:** Air handling units: SDV / SDVQ

**Mounting Description:** Ceiling suspended (with or without spring isolators)

**Seismic Certification Limits:** Sds = 2.50 g at z/h=1.0 (Fp/Wp = 1.88 or 4.50)

### Water Coils

| Model Number | Manufacturer | Fin Material | Tube Material | Weight (lb) | Unit                  |
|--------------|--------------|--------------|---------------|-------------|-----------------------|
| 1 row        | Price        | Aluminum     | Copper        | 21          | UUT15A-B              |
| 2 Row        |              |              |               | 30          | Interpolated          |
| 3 Row        |              |              |               | 42          | Interpolated          |
| 4 row        |              |              |               | 52          | UUT1, 2, 12B-C, 13A-H |

### Electric Coils (EC)

| Model Number     | Manufacturer | Material                 | Weight (lb) | Unit         |
|------------------|--------------|--------------------------|-------------|--------------|
| EC Sz. 4 / 5 / 6 | Price        | Zinc-coated carbon steel | 26          | UUT24A-B     |
| EC Sz. 7 / 8     |              |                          | 28          | Interpolated |
| EC Sz. 9 / 10    |              |                          | 32          | Interpolated |
| EC Sz. 12        |              |                          | 37          | Interpolated |
| EC Sz. 14        |              |                          | 43          | Interpolated |
| EC Sz. 16        |              |                          | 48          | Interpolated |
| EC Sz. 24x16     |              |                          | 76          | UUT25A-B     |

### Liners (Terminal Casing and Silencer/Attenuator)

| Model Number | Manufacturer | Material                                             | Weight (lb) | Unit                  |
|--------------|--------------|------------------------------------------------------|-------------|-----------------------|
| CRAF         | Price        | Cleanroom aluminum foil faced fiberglass             | 8           | UUT12B-C              |
| SM           |              | Solid metal (22 gauge zinc-coated carbon steel)      | 20          | UUT13A-H, 25A-B       |
| PM           |              | Perforated metal (22 gauge zinc-coated carbon steel) | 15          | UUT13A-H              |
| AFPM         |              | Aluminum foil faced fiberglass with perforated metal | 12          | UUT13A-H              |
| FF           |              | Fiber free foam                                      | 5           | UUT15A-B              |
| FB           |              | Foil faced fiberglass board                          | 5           | UUT15A-B              |
| FG           |              | Fiberglass                                           | 5           | UUT1, 2, 18A-B, 24A-B |
| FC           |              | Fiberglass cloth (silencer/attenuator only)          | 10          | UUT15A-B, 13A-H       |
| PL           |              | Polymer film liner (silencer/attenuator only)        | 8           | UUT12B-C              |

### SDV Attenuators / SDVQ Silencers

| Model Number            | Manufacturer | Liner Material                                                                                                                                                              | Weight (lb) | Unit            |
|-------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|
| SDVQ Elbow Silencer     | Price        | Casing may be the same as terminal casing liner (CRAF, SM, PM, AFPM, FF, FB, FG). Attenuators/silencers may have optional fiberglass cloth (FC) or polymer film (PL) liner. | 52          | UUT15A-B        |
| SDVQ 3' Silencer (36")  |              |                                                                                                                                                                             | 52          | UUT13A-H        |
| SDV 3' Attenuator (36") |              |                                                                                                                                                                             | 49          | Interpolated    |
| SDV 5' Attenuator (59") |              |                                                                                                                                                                             | 82          | Interpolated    |
| 5' Silencer (60")       |              |                                                                                                                                                                             | 87          | UUT12B-C, 25A-B |

# Special Seismic Certification

## Certified Subcomponents (Continued): SDV / SDVQ



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 5**

**Product Line:** Air handling units: SDV / SDVQ

**Mounting Description:** Ceiling suspended (with or without spring isolators)

**Seismic Certification Limits:** Sds = 2.50 g at z/h=1.0 (Fp/Wp = 1.88 or 4.50)

### Damper Actuator Controller

| Model Number     | Manufacturer                  | Description                                             | Material                         | Weight (lb) | Unit                         |
|------------------|-------------------------------|---------------------------------------------------------|----------------------------------|-------------|------------------------------|
| PIC              | Price                         | Controller w/ integral actuator; 24V                    | Plastic cover with circuit board | 10          | UUT2, 13B, 13G, 24A-B, 25A-B |
| PAC              |                               | Controller, 24V w/KMC MEP 4003 actuator                 |                                  | 10          | UUT12B-C                     |
| W7751F           | Honeywell                     | Controller, 24V (208/240V transformer)                  |                                  | 8           | UUT13A, 13H                  |
| W7751H           |                               | Controller w/ integral actuator, 24V (120V transformer) |                                  | 8           | UUT13D, 13E                  |
| W7751D           |                               | Controller, 24V                                         |                                  | 8           | Interpolated                 |
| W7751B           |                               | Controller, 24V                                         |                                  | 8           | Interpolated                 |
| PVL6436AS        |                               | Controller w/ integral actuator, 24V                    |                                  | 8           | UUT13C, 13F                  |
| MS VMA1620       | Johnson Controls              | Controller w/ integral actuator, 24V                    |                                  | 7           | UUT13A, 13H                  |
| GDE131.1P        | Siemens                       | Damper actuator controller, 24V (120V transformer)      |                                  | 6           | UUT1                         |
| 540-100 & GDE131 |                               | Controller / actuator combo, 24V (277V transformer)     |                                  | 9           | UUT15A, 15B                  |
| 540-110 & GDE131 |                               | Controller / actuator combo, 24V (277V transformer)     |                                  | 9           | Same as UUT15A-B             |
| 550-065 & GDE131 |                               | Controller / actuator combo, 24V                        |                                  | 9           | Same as UUT13B,G             |
| 550-066 & GDE131 |                               | Controller / actuator combo, 24V                        |                                  | 9           | Same as UUT13B,G             |
| 550-067 & GDE131 |                               | Controller / actuator combo, 24V                        |                                  | 9           | Same as UUT13B,G             |
| 550-068 & GDE131 |                               | Controller / actuator combo, 24V                        |                                  | 9           | UUT13B, 13G                  |
| 550-767 & GDE131 |                               | Controller / actuator combo, 24V                        |                                  | 9           | Same as UUT13D-E             |
| 540-844 & GDE131 |                               | Controller / actuator combo, 24V                        |                                  | 9           | UUT13D-E                     |
| MR-VAV-AX        | Schneider Electric (TAC)      | Controller w/ integral actuator, 24V                    |                                  | 7           | UUT12B-C                     |
| Xenta 102-AX     |                               | Controller w/ integral actuator, 24V                    |                                  | 8           | UUT13C, 13F                  |
| b3-866-V         | Schneider Electric (Andover)  | Controller w/ integral actuator, 24V                    |                                  | 7           | Same as UUT12B-C             |
| b3-865-V         |                               | Controller w/ integral actuator, 24V                    |                                  | 7           | Same as UUT12B-C             |
| i2 866-V         |                               | Controller w/ integral actuator, 24V                    |                                  | 7           | Same as UUT12B-C             |
| i2 865-V         |                               | Controller w/ integral actuator, 24V                    |                                  | 7           | Same as UUT12B-C             |
| MNL-V2RV3        | Schneider Electric (Invensys) | Controller w/ integral actuator, 24V                    |                                  | 7           | Same as UUT12B-C             |
| ZN141V+          | Automated Logic               | Controller w/ integral actuator, 24V                    |                                  | 7           | Same as UUT18A-B             |
| ZN341V+          |                               | Controller w/ integral actuator, 24V                    |                                  | 7           | UUT18A-B (x2)                |

## Special Seismic Certification

Certified Subcomponents: ACBL, ACBL HE, ACBM HE, ACBH



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 6**

**Product Line:** Air handling units: Chilled Beams: ACBL, ACBL HE, ACBM HE, ACBH

**Mounting Description:** Ceiling suspended (without spring isolators)

**Seismic Certification Limits:** Sds = 1.93 g at z/h=1.0 (Fp/Wp = 1.45)

### Coils

| Model Number  | Manufacturer | Fin Material | Tube Material | Max. Weight (lb) | Unit                      |
|---------------|--------------|--------------|---------------|------------------|---------------------------|
| 1 row, 2 pipe | Price        | Aluminum     | Copper        | 27               | Extrapolated              |
| 1 row, 4 pipe |              | Aluminum     | Copper        | 29               | UUT10A-B, 11B-D           |
| 2 row, 2 pipe |              | Aluminum     | Copper        | 30               | UUT7B                     |
| 2 row, 4 pipe |              | Aluminum     | Copper        | 32               | UUT3A-B, 4B, 5A-C, 22, 23 |

### Face Options

| Model Number | Manufacturer | Description                      | Material                   | Max. Weight (lb) | Unit                       |
|--------------|--------------|----------------------------------|----------------------------|------------------|----------------------------|
| n/a          | Price        | Perforated face, no wings        | Powder-coated carbon steel | 28               | UUT10A-B, 11B-D, UUT3A, 5A |
| n/a          |              | Perforated face, no wings, Gen 3 | Powder-coated carbon steel | 28               | UUT23                      |
| n/a          |              | Bar grill face, no wings         | Powder-coated carbon steel | 45               | UUT3B, 5B                  |
| n/a          |              | Bar grill face, no wings, Gen 3  | Powder-coated carbon steel | 45               | UUT22                      |
| n/a          |              | Security face, no wings          | Powder-coated carbon steel | 12               | UUT7B                      |

# Special Seismic Certification

## Certified Subcomponents: FFU and FFU HE



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 7**

**Product Line:** Air handling units: Fan Filter Units: FFU and FFU HE

**Mounting Description:** Ceiling suspended (without spring isolators)

**Seismic Certification Limits:** Sds = 2.0 g at z/h=1.0 (Fp/Wp = 1.50)

| Duct Inlet    |              |                       |          |                          |                              |              |              |
|---------------|--------------|-----------------------|----------|--------------------------|------------------------------|--------------|--------------|
| Model Number  | Manufacturer | Duct Diameter (in)    | Material |                          | Weight (lb)                  | Unit         |              |
| 237661-003    | Price        | 8                     | Aluminum |                          | 4                            | Extrapolated |              |
| 237661-001    |              | 10                    |          |                          | 4                            | UUT16        |              |
| 237661-002    |              | 12                    |          |                          | 4                            | UUT17        |              |
| Fan Motor     |              |                       |          |                          |                              |              |              |
| Model Number  | Manufacturer | Voltage               | HP       | Type <sup>1</sup>        | Material                     | Weight (lb)  | Unit         |
| 5KCP39GGWE97S | Genteq       | 115V                  | 1/6      | PSC                      | Painted carbon steel, copper | 12           | Extrapolated |
| 5KCP39GGWE96S |              | 208-240V              |          | PSC                      |                              | 12           | Extrapolated |
| 5KCP39GGZ340S |              | 115V                  | PSC      | 12                       |                              | UUT20        |              |
| 5KCP39GGZ363S |              | 208-240V              | 1/5      | PSC                      |                              | 12           | Interpolated |
| 5KCP39GGZ362S |              | 277V                  |          | PSC                      |                              | 12           | UUT21        |
| 5SAD39DLV519S |              | 120/240/277V          | 1/3      | ECM                      | Painted carbon steel, copper | 9            | UUT16, 17    |
| 5SAB39DLV5487 | 115/240V     | 1/3                   | ECM      | 9                        |                              | UUT19A       |              |
| 019219-001    | Broad Ocean  | 115V                  | 1/3      | ECM                      | Painted carbon steel, copper | 9            | UUT19B       |
| 019219-002    |              | 240V                  | 1/3      | ECM                      |                              | 9            | UUT19C       |
| 019219-003    |              | 277V                  | 1/3      | ECM                      |                              | 9            | Extrapolated |
| Fan Wheel     |              |                       |          |                          |                              |              |              |
| Model Number  | Manufacturer | Description           | Inlet    | Material                 |                              | Weight (lb)  | Unit         |
| BC-1075-300S  | Revcor       | Forward curved wheel  | Single   | Zinc plated carbon steel |                              | 6            | UUT16        |
| BC-1162-400S  |              |                       | Single   |                          |                              | 6            | UUT17        |
| 33-30016      | Morrison     | Backward curved wheel | Single   | Aluminum                 |                              | 8            | UUT20        |

1. PSC= permanent split capacitor (constant speed); ECM = electrically commutated motor (variable speed)



# Special Seismic Certification

## Certified Subcomponents: FFU and FFU HE (Continued)



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 8**

**Product Line:** Air handling units: Fan Filter Units: FFU and FFU HE

**Mounting Description:** Ceiling suspended (without spring isolators)

**Seismic Certification Limits:** Sds = 2.0 g at z/h=1.0 (Fp/Wp = 1.50)

| Filters (HEPA, ULPA)          |                  |                             |           |                                        |             |                           |
|-------------------------------|------------------|-----------------------------|-----------|----------------------------------------|-------------|---------------------------|
| Model Number                  | Manufacturer     | Description                 | Size (in) | Material                               | Weight (lb) | Unit                      |
| 0-007-3-19-06-SU-52-00-19P19P | Flanders         | HEPA filter                 | 12        | Aluminum frame, glass microfiber media | 12          | UUT16                     |
| 0-007-2-19-06-SU-52-00-19P31P |                  |                             | 15        |                                        | 15          | Interpolated              |
| 0-007-2-19-06-SU-52-00-19P43P |                  |                             | 19        |                                        | 18          | UUT17                     |
| 0-009-3-19-06-SU-52-00-19P19P |                  | ULPA filter                 | 12        |                                        | 12          | Extrapolated <sup>1</sup> |
| 0-009-2-19-06-SU-52-00-19P31P |                  |                             | 15        |                                        | 15          | Extrapolated <sup>1</sup> |
| 0-009-2-19-06-SU-52-00-19P43P |                  |                             | 19        |                                        | 18          | Extrapolated <sup>1</sup> |
| 45349PI                       | Filtration Group | Room Side Replaceable (RSR) | 24 x 24   | Aluminum frame, glass microfiber media | 12          | UUT21                     |
| 45350PI                       |                  |                             | 24 x 36   |                                        | 15          | Interpolated              |
| 45351PI                       |                  |                             | 24 x 48   |                                        | 18          | UUT19A,B,C                |
| 45384PI                       |                  | Bench Top Replaceable (BTR) | 24 x 24   |                                        | 14          | Extrapolated <sup>2</sup> |
| 45385PI                       |                  |                             | 24 x 36   |                                        | 17          | Extrapolated <sup>2</sup> |
| 45386PI                       |                  |                             | 24 x 48   |                                        | 20          | UUT20                     |
| 45352PI                       |                  | Room Side Replaceable (RSR) | 24 x 24   |                                        | 12          | Extrapolated <sup>1</sup> |
| 45353PI                       |                  |                             | 24 x 36   |                                        | 15          | Extrapolated <sup>1</sup> |
| 45354PI                       |                  |                             | 24 x 48   |                                        | 18          | Extrapolated <sup>1</sup> |
| 45387PI                       |                  | Bench Top Replaceable (BTR) | 24 x 24   |                                        | 14          | Extrapolated <sup>1</sup> |
| 45388PI                       |                  |                             | 24 x 36   |                                        | 17          | Extrapolated <sup>1</sup> |
| 45389PI                       |                  |                             | 24 x 48   |                                        | 20          | Extrapolated <sup>1</sup> |

1. Extrapolated filters are identical to the tested filters, except for the coarseness of the filter media.

2. Extrapolated filters are bookended in type and construction by the tested units.

# Special Seismic Certification

## Certified Subcomponents: FFU and FFU HE (Continued)



DCL Project No. 21854-2001

**Manufacturer:** Price Industries Limited

**TABLE 9**

**Product Line:** Air handling units: Fan Filter Units: FFU and FFU HE

**Mounting Description:** Ceiling suspended (without spring isolators)

**Seismic Certification Limits:** Sds = 2.0 g at z/h=1.0 (Fp/Wp = 1.50)

| LED Kit          |                   |                                                |                                                         |                  |             |                           |
|------------------|-------------------|------------------------------------------------|---------------------------------------------------------|------------------|-------------|---------------------------|
| Model Number     | Manufacturer      | Description                                    | Material                                                |                  | Weight (lb) | Unit                      |
| FL               | Price             | LED filter indicator option                    | Plastic                                                 |                  | 3           | UUT16, 17                 |
| ML               |                   | LED motor indicator option                     |                                                         |                  | 3           | UUT16, 17                 |
| Controller       |                   |                                                |                                                         |                  |             |                           |
| Model Number     | Manufacturer      | Description                                    | Material                                                |                  | Weight (lb) | Unit                      |
| ECMDX            | Price             | ECM Deluxe Speed Controller                    | Galvanized carbon steel plate, fiberglass circuit board |                  | 5           | UUT16, 17                 |
| ECM              |                   | ECM Standard Speed Controller                  |                                                         |                  | 5           | Extrapolated <sup>1</sup> |
| BFC              |                   | BACnet Flow Controller                         |                                                         |                  | 5           | UUT19A-C                  |
| USC 115V         |                   | Universal Speed Controller                     |                                                         |                  | 5           | UUT 20                    |
| USC 208-240/277V |                   | Universal Speed Controller                     |                                                         |                  | 5           | UUT 21                    |
| Contactors       |                   |                                                |                                                         |                  |             |                           |
| Model Number     | Manufacturer      | Description                                    | Outer Material                                          | Winding Material | Weight (lb) | Unit                      |
| HCT-01D0AA03173  | Hartland Controls | 3"L x 3"D x 2"H                                | Plastic cover with carbon steel                         | Copper           | 1           | UUT16, 17                 |
| HCT-03D0AA03173  |                   | 3"L x 3"D x 2"H                                |                                                         |                  | 1           | UUT19C                    |
| HCT-09D0AA03173  |                   | 3"L x 3"D x 2"H                                |                                                         |                  | 1           | Extrapolated <sup>2</sup> |
| FFU Options      |                   |                                                |                                                         |                  |             |                           |
| Model Number     | Manufacturer      | Description                                    | Material                                                |                  | Weight (lb) | Unit                      |
| ATS              | Price             | Aerosol test system                            | Aluminum port, rubber tubing                            |                  | 2           | UUT16, 17                 |
| Pressure Port    |                   | Static pressure port                           | Stainless steel bolt, aluminum rivet nut                |                  | 1           | UUT16, 17                 |
| FL               |                   | LED filter indicator option                    | Galvanized carbon steel box, LED, electrical components |                  | 1           | UUT16, 17                 |
| ML               |                   | LED motor indicator option                     | Galvanized carbon steel box, LED, electrical components |                  | 1           | UUT16, 17                 |
| FBAS             |                   | Filter building automation signal option       | Galvanized carbon steel box, electrical components      |                  | 1           | UUT16, 17                 |
| MBAS             |                   | Motor building automation system signal option | Galvanized carbon steel box, electrical components      |                  | 1           | UUT16, 17                 |

1. Extrapolated controller is a depopulated version of the controller tested in UUT16 and UUT17.

2. Extrapolated contactor identical in material, configuration, size and weight to the contactors tested in UUT16 and UUT17.

**Special Seismic Certification  
Tested Components**



DCL Project No. 21854-2001

Manufacturer: Price Industries Limited

TABLE 10

Product Line: Air handling units

Mounting Description: Ceiling suspended (with or without spring isolators)

| Model <sup>1</sup> | Cabinet Construction                         | Cabinet Dimensions (in)  |        |       |        | Weight (lb) | Threaded Rod Hanger Dia. (in) | Diagonal Cable Brace Dia. (in) | Max. Hanger Rod Length w/out Stiffener (in) | Max. Hanger Rod Spacing, Unit Only (in) | Max. Hanger Rod Spacing, Including Silencer (in) | Spring Isolators | Sds (g), z/h=1 | F <sub>p</sub> /W <sub>p</sub> | Report Number | Unit   |
|--------------------|----------------------------------------------|--------------------------|--------|-------|--------|-------------|-------------------------------|--------------------------------|---------------------------------------------|-----------------------------------------|--------------------------------------------------|------------------|----------------|--------------------------------|---------------|--------|
|                    |                                              | Length w/ Access Section | Length | Width | Height |             |                               |                                |                                             |                                         |                                                  |                  |                |                                |               |        |
| SDV, SDVQ          |                                              |                          |        |       |        |             |                               |                                |                                             |                                         |                                                  |                  |                |                                |               |        |
| SDV 4              | Zinc-coated carbon steel                     | n/a                      | 22 1/8 | 12    | 8      | 33          | 3/8                           | 3/16                           | 12                                          | 12                                      | n/a                                              | No               | 2.50           | 1.88                           | 82100-1201    | UUT1   |
| SDV 4              | Zinc-coated carbon steel w/ EC               | n/a                      | 42 1/4 | 12    | 8      | 40          | 3/8                           | 3/16                           | 12                                          | 12                                      | n/a                                              | No               | 2.50           | 1.88                           | 21854-2001    | UUT24A |
| SDV 4              | Zinc-coated carbon steel w/ EC               | n/a                      | 42 1/4 | 12    | 8      | 40          | 3/8                           | 3/16                           | 12                                          | 12                                      | n/a                                              | Yes              | 2.50           | 4.50                           | 21854-2001    | UUT24B |
| SDV 16             | Zinc-coated carbon steel                     | n/a                      | 23 5/8 | 24    | 18     | 81          | 3/8                           | 3/16                           | 12                                          | 16                                      | n/a                                              | No               | 2.50           | 1.88                           | 82100-1201    | UUT2   |
| SDV 16             | Zinc-coated carbon steel                     | n/a                      | 23 5/8 | 24    | 18     | 81          | 3/8                           | 3/16                           | n/a                                         | 16                                      | n/a                                              | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT14A |
| SDV 16             | Zinc-coated carbon steel                     | n/a                      | 23 5/8 | 24    | 18     | 42          | 3/8                           | 3/16                           | n/a                                         | 22                                      | n/a                                              | No               | 2.50           | 1.88                           | 58004-1501    | UUT18A |
| SDV 16             | Zinc-coated carbon steel                     | n/a                      | 23 5/8 | 24    | 18     | 42          | 3/8                           | 3/16                           | n/a                                         | 22                                      | n/a                                              | Yes              | 2.50           | 4.50                           | 58004-1501    | UUT18B |
| SDVQ 4             | Zinc-coated carbon steel w/ elbow silencer   | 32 1/2                   | 22 1/8 | 12    | 8      | 60          | 3/8                           | 3/16                           | n/a                                         | 12                                      | 35                                               | No               | 2.50           | 1.88                           | 82100-1202    | UUT15A |
| SDVQ 4             | Zinc-coated carbon steel w/ elbow silencer   | 32 1/2                   | 22 1/8 | 12    | 8      | 60          | 3/8                           | 3/16                           | n/a                                         | 12                                      | 35                                               | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT15B |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | No               | 2.50           | 1.88                           | 82100-1202    | UUT13A |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | No               | 2.50           | 1.88                           | 82100-1202    | UUT13B |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | No               | 2.50           | 1.88                           | 82100-1202    | UUT13C |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | No               | 2.50           | 1.88                           | 82100-1202    | UUT13D |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT13E |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT13F |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT13G |
| SDVQ 16            | Zinc-coated carbon steel w/ 3ft silencer     | 35 5/8                   | 23 5/8 | 24    | 18     | 177         | 3/8                           | 3/16                           | n/a                                         | 16                                      | 47                                               | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT13H |
| SDVQ 24x16         | Zinc-coated carbon steel w/ 5ft silencer     | 31                       | 19     | 38    | 18     | 260         | 3/8                           | 3/16                           | n/a                                         | 12                                      | 75                                               | No               | 2.50           | 1.88                           | 82100-1202    | UUT12B |
| SDVQ 24x16         | Zinc-coated carbon steel w/ 5ft silencer     | 31                       | 19     | 38    | 18     | 260         | 3/8                           | 3/16                           | n/a                                         | 12                                      | 75                                               | Yes              | 2.50           | 4.50                           | 82100-1202    | UUT12C |
| SDVQ 24x16         | Zinc-coated carbon steel w/ EC, 5ft silencer | n/a                      | 38 1/2 | 38    | 18     | 285         | 3/8                           | 3/16                           | 12                                          | 12                                      | 75                                               | No               | 2.50           | 1.88                           | 21854-2001    | UUT25A |
| SDVQ 24x16         | Zinc-coated carbon steel w/ EC, 5ft silencer | n/a                      | 38 1/2 | 38    | 18     | 285         | 3/8                           | 3/16                           | 12                                          | 12                                      | 75                                               | Yes              | 2.50           | 4.50                           | 21854-2001    | UUT25B |

1. SDVQ is an SDV with housing extension including optional access door section.



**Special Seismic Certification  
Tested Components (Continued)**



DCL Project No. 21854-2001

Manufacturer: Price Industries Limited

TABLE 11

Product Line: Air handling units

Mounting Description: Ceiling suspended (with or without spring isolators)

| Model                        | Cabinet Construction       | Cabinet Dimensions (in) |        |        | Weight (lb) | Threaded Rod Hanger Diameter (in) | Diagonal Cable Brace Diameter (in) | Max. Hanger Rod Length w/out Stiffener (in) | Max. Hanger Rod Spacing, unit only (in) | Spring Isolators | Sds (g), z/h=1 | F <sub>p</sub> /W <sub>p</sub> | Report Number | Unit   |
|------------------------------|----------------------------|-------------------------|--------|--------|-------------|-----------------------------------|------------------------------------|---------------------------------------------|-----------------------------------------|------------------|----------------|--------------------------------|---------------|--------|
|                              |                            | Length                  | Width  | Height |             |                                   |                                    |                                             |                                         |                  |                |                                |               |        |
| ACBL, ACBL HE, ACBM HE, ACBH |                            |                         |        |        |             |                                   |                                    |                                             |                                         |                  |                |                                |               |        |
| ACBL 12x24                   | Powder-coated carbon steel | 23 3/4                  | 11 3/4 | 10     | 19          | 3/8                               | 1/8                                | 12                                          | 12                                      | No               | 2.50           | 1.88                           | 82100-1201    | UUT3A  |
| ACBL 12x24                   | Powder-coated carbon steel | 23 3/4                  | 11 3/4 | 10     | 21          | 3/8                               | 1/8                                | 12                                          | 12                                      | No               | 2.50           | 1.88                           | 82100-1201    | UUT3B  |
| ACBL 12x120                  | Powder-coated carbon steel | 119 3/4                 | 11 3/4 | 10     | 100         | 1/2                               | 3/16                               | n/a                                         | 62                                      | No               | 2.50           | 1.88                           | 82100-1203    | UUT4B  |
| ACBL HE 24x24                | Powder-coated carbon steel | 23 3/4                  | 23 3/4 | 10     | 28          | 3/8                               | 1/8                                | 12                                          | 12                                      | No               | 2.50           | 1.88                           | 82100-1201    | UUT5A  |
| ACBL HE 24x24                | Powder-coated carbon steel | 23 3/4                  | 23 3/4 | 10     | 33          | 3/8                               | 1/8                                | 12                                          | 12                                      | No               | 2.50           | 1.88                           | 82100-1201    | UUT5B  |
| ACBL HE 24x24                | Powder-coated carbon steel | 23 3/4                  | 23 3/4 | 10     | 33          | 3/8                               | 1/8                                | 12                                          | 12                                      | Yes              | 2.50           | 4.50                           | 82100-1203    | UUT5C  |
| ACBL HE 24x120               | Powder-coated carbon steel | 119 3/4                 | 23 3/4 | 10     | 136         | 3/8                               | 3/16                               | n/a                                         | 54                                      | No               | 2.50           | 1.88                           | 82100-1203    | UUT9A  |
| ACBL HE 24x120               | Powder-coated carbon steel | 119 3/4                 | 23 3/4 | 10     | 136         | 3/8                               | 3/16                               | n/a                                         | 54                                      | Yes              | 1.93           | 3.47                           | 82100-1203    | UUT9B  |
| ACBL HE 24x108               | Powder-coated carbon steel | 107 3/4                 | 23 3/4 | 10     | 153         | 3/8                               | 3/16                               | n/a                                         | 37                                      | No               | 2.50           | 1.88                           | 51223-1601    | UUT22  |
| ACBL HE 24x120               | Powder-coated carbon steel | 119 3/4                 | 23 3/4 | 10     | 172         | 3/8                               | 3/16                               | n/a                                         | 37                                      | No               | 2.50           | 1.88                           | 51223-1601    | UUT23  |
| ACBM HE 24x24                | Powder-coated carbon steel | 23 3/4                  | 23 3/4 | 12     | 32          | 3/8                               | 3/16                               | n/a                                         | 18                                      | No               | 2.50           | 1.88                           | 82100-1203    | UUT10A |
| ACBM HE 24x24                | Powder-coated carbon steel | 23 3/4                  | 23 3/4 | 12     | 32          | 3/8                               | 3/16                               | n/a                                         | 18                                      | Yes              | 2.50           | 4.50                           | 82100-1203    | UUT10B |
| ACBM HE 24x72                | Powder-coated carbon steel | 71 3/4                  | 23 3/4 | 12     | 107         | 3/8                               | 3/16                               | n/a                                         | 50                                      | No               | 2.50           | 1.88                           | 82100-1203    | UUT11B |
| ACBM HE 24x72                | Powder-coated carbon steel | 71 3/4                  | 23 3/4 | 12     | 107         | 3/8                               | 3/16                               | n/a                                         | 50                                      | Yes              | 2.50           | 4.50                           | 82100-1203    | UUT11D |
| ACBH 48                      | Powder-coated carbon steel | 48                      | 17     | 8      | 130         | 3/8                               | 3/16                               | 10                                          | 49                                      | No               | 2.50           | 1.88                           | 82100-1201    | UUT7B  |
| FFU, FFU HE                  |                            |                         |        |        |             |                                   |                                    |                                             |                                         |                  |                |                                |               |        |
| FFU 2 x 2                    | Painted aluminum           | 23 3/4                  | 23 3/4 | 18 7/8 | 60          | 3/8                               | 3/16                               | n/a                                         | 21                                      | No               | 2.50           | 1.88                           | 44923-1401    | UUT16  |
| FFU 2 x 4                    | Painted aluminum           | 47 3/4                  | 23 3/4 | 18 1/8 | 74          | 3/8                               | 3/16                               | n/a                                         | 44                                      | No               | 2.50           | 1.88                           | 44923-1401    | UUT17  |
| FFU HE 2 x 2                 | Painted aluminum           | 23 2/3                  | 23 2/3 | 19 1/4 | 54          | 3/8                               | 3/16                               | n/a                                         | 22                                      | No               | 2.00           | 1.50                           | 62341-1601    | UUT21  |
| FFU HE 2 x 4                 | Stainless steel            | 47 7/8                  | 23 7/8 | 19 1/4 | 96          | 3/8                               | 3/16                               | n/a                                         | 46                                      | No               | 2.00           | 1.50                           | 62341-1601    | UUT19A |
| FFU HE 2 x 4                 | Stainless steel            | 47 7/8                  | 23 7/8 | 19 1/4 | 96          | 3/8                               | 3/16                               | n/a                                         | 46                                      | No               | 2.00           | 1.50                           | 62341-1601    | UUT19B |
| FFU HE 2 x 4                 | Stainless steel            | 47 7/8                  | 23 7/8 | 19 1/4 | 96          | 3/8                               | 3/16                               | n/a                                         | 46                                      | No               | 2.00           | 1.50                           | 62341-1601    | UUT19C |
| FFU HE 2 x 4                 | Aluminum                   | 47 7/8                  | 23 7/8 | 17 2/5 | 66          | 3/8                               | 3/16                               | n/a                                         | 46                                      | No               | 2.00           | 1.50                           | 62341-1601    | UUT20  |

BY: Mohammad Karim

DATE: 09/02/2021



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |                      |                                    |              |               |                   |                                      |                   |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------|--------------|---------------|-------------------|--------------------------------------|-------------------|-------------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             |                      |                                    |              |               |                   |                                      | <b>UUT 1</b>      |                   |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>Model Number:</b> SDV 4                                                                                                                                                                                                |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>Product Construction Summary:</b><br>Zinc-coated steel cabinet                                                                                                                                                         |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>Options / Component Summary:</b><br>1 row water coil, fiberglass liner, Siemens GDE131.1P controller, 24V with 120V transformer                                                                                        |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.</b> |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>UUT Properties</b>                                                                                                                                                                                                     |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>Operating Weight</b><br>(lb)                                                                                                                                                                                           |                      | <b>Cabinet Dimensions (inches)</b> |              |               |                   | <b>Lowest Natural Frequency (Hz)</b> |                   |                   |
|                                                                                                                                                                                                                           |                      | <b>Length</b>                      | <b>Width</b> | <b>Height</b> |                   | <b>Front-Back</b>                    | <b>Side-Side</b>  | <b>Vertical</b>   |
| 33                                                                                                                                                                                                                        |                      | 22 1/8                             | 12           | 8             |                   | N/A                                  | N/A               | N/A               |
| <b>Seismic Test Parameters</b>                                                                                                                                                                                            |                      |                                    |              |               |                   |                                      |                   |                   |
| <b>Building Code</b>                                                                                                                                                                                                      | <b>Test Criteria</b> | <b>Sds (g)</b>                     | <b>z/h</b>   | <b>Ip</b>     | <b>Aflx-H (g)</b> | <b>Arig-H (g)</b>                    | <b>Aflx-V (g)</b> | <b>Arig-V (g)</b> |
| CBC 2019                                                                                                                                                                                                                  | ICC-ES AC156         | 2.50                               | 1.0          | 1.5           | 4.00              | 3.00                                 | 1.67              | 0.67              |

## Unit Mounting Description:



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |              |
|-----------------------------------------------|--------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 2</b> |
| <b>Product Line:</b> Air Handling Units       |              |

**Model Number:** SDV 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil, fiberglass liner, Price (PIC) controller 24V with 120V transformer

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|-------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width | Height | Front-Back                    | Side-Side | Vertical |
| 81                    | 23 5/8                      | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 3A</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL 12x24

**Product Construction Summary:**

Powder-coated carbon steel cabinet

**Options / Component Summary:**

2-row 4-pipe water coils, perforated face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 19                    | 23 3/4                      | 11 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, 1/8-inch diameter steel cable, and four manufacturer-provided friction clip brackets. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 3B</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL 12x24

**Product Construction Summary:**

Powder-coated carbon steel cabinet

**Options / Component Summary:**

2-row 4-pipe water coils, bar grill face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 21                    | 23 3/4                      | 11 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, 1/8-inch diameter steel cable, and four manufacturer-provided friction clip brackets. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                    |                             |         |        |     |            |                               |            |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|--------|-----|------------|-------------------------------|------------|------------|
| Manufacturer: Price Industries Limited                                                                                                                                                                             |                             |         |        |     |            | UUT 4B                        |            |            |
| Product Line: Air Handling Units                                                                                                                                                                                   |                             |         |        |     |            |                               |            |            |
| Model Number: ACBL 12x120                                                                                                                                                                                          |                             |         |        |     |            |                               |            |            |
| Product Construction Summary:<br>Powder-coated carbon steel cabinet                                                                                                                                                |                             |         |        |     |            |                               |            |            |
| Options / Component Summary:<br>2-row 4-pipe water coils, bar grill face with no wings                                                                                                                             |                             |         |        |     |            |                               |            |            |
| Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                             |         |        |     |            |                               |            |            |
| UUT Properties                                                                                                                                                                                                     |                             |         |        |     |            |                               |            |            |
| Operating Weight<br>(lb)                                                                                                                                                                                           | Cabinet Dimensions (inches) |         |        |     |            | Lowest Natural Frequency (Hz) |            |            |
|                                                                                                                                                                                                                    | Length                      | Width   | Height |     |            | Front-Back                    | Side-Side  | Vertical   |
| 100                                                                                                                                                                                                                | 119 3/4                     | 11 3/4  | 10     |     |            | N/A                           | N/A        | N/A        |
| Seismic Test Parameters                                                                                                                                                                                            |                             |         |        |     |            |                               |            |            |
| Building Code                                                                                                                                                                                                      | Test Criteria               | Sds (g) | z/h    | Ip  | Aflx-H (g) | Arig-H (g)                    | Aflx-V (g) | Arig-V (g) |
| CBC 2019                                                                                                                                                                                                           | ICC-ES AC156                | 2.50    | 1.0    | 1.5 | 4.00       | 3.00                          | 1.67       | 0.67       |

## Unit Mounting Description:



Unit was ceiling-suspended from the DCL shake table interface frame using 1/2-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using six manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The threaded rod was stiffened with slotted A-12 channeled and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 5A</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL HE 24x24

**Product Construction Summary:**

Powder-coated carbon steel cabinet

**Options / Component Summary:**

2-row 4-pipe water coils, perforated face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 28                    | 23 3/4                      | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, 1/8-inch diameter steel cable and four manufacturer-provided friction clip brackets. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 5B</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL HE 24x24

**Product Construction Summary:**

Powder-coated carbon steel

**Options / Component Summary:**

2-row 4-pipe water coils, bar grill face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 33                    | 23 3/4                      | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, 1/8-inch diameter steel cable and four manufacturer-provided friction clip brackets. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 5C</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL HE 24x24

**Product Construction Summary:**

Powder-coated carbon steel

**Options / Component Summary:**

2-row 4-pipe water coils, bar grill face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 33                    | 23 3/4                      | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod (12-inch length between attachment points), SCBH Mason brackets, 1/8-inch diameter steel cable and four manufacturer-provided friction clip brackets. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 7B</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBH 48

**Product Construction Summary:**

Powder-coated steel cabinet

**Options / Component Summary:**

2-row 2-pipe water coils, security face

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|-------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width | Height | Front-Back                    | Side-Side | Vertical |
| 130                   | 48                          | 17    | 8      | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



Terminal bracket used for UUT7B tests. Brackets are 12 gage zinc-coated steel attached to unit with four #14 sheet metal screws.

Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (10-inch length between attachment points), SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, connected to the unit with four #14 sheet metal screws each. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 9A</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL HE 24x120

**Product Construction Summary:**

Powder-coated carbon steel cabinet

**Options / Component Summary:**

2-row 4-pipe water coils, bar grill face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 136                   | 119 3/4                     | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, 3/16-inch diameter steel cable, and six manufacturer-provided friction clip brackets. The threaded rod was stiffened with slotted A-12 channeled and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 9B</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL HE 24x120

**Product Construction Summary:**

Powder-coated carbon steel cabinet

**Options / Component Summary:**

2-row 4-pipe water coils, bar grill face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 136                   | 119 3/4                     | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 1.93    | 1.0 | 1.5 | 3.09       | 2.32       | 1.29       | 0.51       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, 3/16-inch diameter steel cable, and six manufacturer-provided friction clip brackets. The threaded rod was stiffened with slotted A-12 channeled and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |                             |         |        |                               |            |                |            |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|--------|-------------------------------|------------|----------------|------------|------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             |                             |         |        |                               |            | <b>UUT 10A</b> |            |            |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |                             |         |        |                               |            |                |            |            |
| <b>Model Number:</b> ACBM HE 24x24                                                                                                                                                                                        |                             |         |        |                               |            |                |            |            |
| <b>Product Construction Summary:</b><br>Powder-coated carbon steel cabinet                                                                                                                                                |                             |         |        |                               |            |                |            |            |
| <b>Options / Component Summary:</b><br>4-pipe water coils, grill face with no wings                                                                                                                                       |                             |         |        |                               |            |                |            |            |
| <b>Note:</b> The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                             |         |        |                               |            |                |            |            |
| <b>UUT Properties</b>                                                                                                                                                                                                     |                             |         |        |                               |            |                |            |            |
| Operating Weight<br>(lb)                                                                                                                                                                                                  | Cabinet Dimensions (inches) |         |        | Lowest Natural Frequency (Hz) |            |                |            |            |
|                                                                                                                                                                                                                           | Length                      | Width   | Height | Front-Back                    | Side-Side  | Vertical       |            |            |
| 32                                                                                                                                                                                                                        | 23 3/4                      | 23 3/4  | 12     | N/A                           | N/A        | N/A            |            |            |
| <b>Seismic Test Parameters</b>                                                                                                                                                                                            |                             |         |        |                               |            |                |            |            |
| Building Code                                                                                                                                                                                                             | Test Criteria               | Sds (g) | z/h    | Ip                            | Aflx-H (g) | Arig-H (g)     | Aflx-V (g) | Arig-V (g) |
| CBC 2019                                                                                                                                                                                                                  | ICC-ES AC156                | 2.50    | 1.0    | 1.5                           | 4.00       | 3.00           | 1.67       | 0.67       |

## Unit Mounting Description:

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The threaded rod was stiffened with slotted A-12 channeled and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             | <b>UUT 10B</b> |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |                |
| <b>Model Number:</b> ACBM HE 24x24                                                                                                                                                                                        |                |
| <b>Product Construction Summary:</b><br>Powder-coated carbon steel cabinet                                                                                                                                                |                |
| <b>Options / Component Summary:</b><br>4-pipe water coils, grill face with no wings                                                                                                                                       |                |
| <b>Note:</b> The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                |

## UUT Properties

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 32                    | 23 3/4                      | 23 3/4 | 12     | N/A                           | N/A       | N/A      |

## Seismic Test Parameters

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

## Unit Mounting Description:

BY: Mohammad Karim



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to the Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                    |                             |         |     |        |            |                               |            |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|-----|--------|------------|-------------------------------|------------|------------|
| Manufacturer: Price Industries Limited                                                                                                                                                                             |                             |         |     |        |            | UUT 11B                       |            |            |
| Product Line: Air Handling Units                                                                                                                                                                                   |                             |         |     |        |            |                               |            |            |
| Model Number: ACBM HE 24x72                                                                                                                                                                                        |                             |         |     |        |            |                               |            |            |
| Product Construction Summary:<br>Powder-coated carbon steel cabinet                                                                                                                                                |                             |         |     |        |            |                               |            |            |
| Options / Component Summary:<br>4-pipe water coils, perforated face with no wings                                                                                                                                  |                             |         |     |        |            |                               |            |            |
| Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                             |         |     |        |            |                               |            |            |
| UUT Properties                                                                                                                                                                                                     |                             |         |     |        |            |                               |            |            |
| Operating Weight (lb)                                                                                                                                                                                              | Cabinet Dimensions (inches) |         |     |        |            | Lowest Natural Frequency (Hz) |            |            |
|                                                                                                                                                                                                                    | Length                      | Width   |     | Height |            | Front-Back                    | Side-Side  | Vertical   |
| 107                                                                                                                                                                                                                | 71 3/4                      | 23 3/4  |     | 12     |            | N/A                           | N/A        | N/A        |
| Seismic Test Parameters                                                                                                                                                                                            |                             |         |     |        |            |                               |            |            |
| Building Code                                                                                                                                                                                                      | Test Criteria               | Sds (g) | z/h | Ip     | Aflx-H (g) | Arig-H (g)                    | Aflx-V (g) | Arig-V (g) |
| CBC 2019                                                                                                                                                                                                           | ICC-ES AC156                | 2.50    | 1.0 | 1.5    | 4.00       | 3.00                          | 1.67       | 0.67       |

## Unit Mounting Description:

BY: Mohammad Karim



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 11D</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** ACBM HE 24x72

**Product Construction Summary:**

Powder-coated carbon steel cabinet

**Options / Component Summary:**

4-pipe water coils, perforated face with no wings

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 107                   | 71 3/4                      | 23 3/4 | 12     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using four manufacturer-supplied terminal brackets, model 222628-001, connected to the unit with four #8 sheet metal screws each. The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 12B</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 24x16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; CRAF liner; Schneider MR-VAV-AX-C controller and Price Analog Controller (PAC) w/KMC MEP-4003 actuator; Straight 5 ft silencer w/ PL liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 260                   | 31                          | 19     | 38    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 12C</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 24x16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; CRAF liner; Schneider MR-VAV-AX-C controller and Price Analog Controller (PAC) w/KMC MEP-4003 actuator; Straight 5 ft silencer w/ PL liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

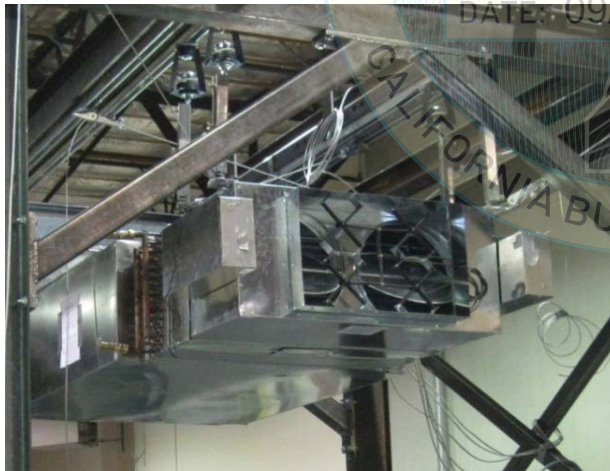
**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 260                   | 31                          | 19     | 38    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13A</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Johnson Controls MS-VMA-1620 and Honeywell W7751F controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

BY: Mohammad Karim

DATE: 09/02/2021

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13B</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Siemens 550-068 and Price (PIC) controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

BY: Mohammad Karim

DATE: 09/02/2021

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13C</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Honeywell PVL6436AS and TAC Xenta 102-AX controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

BY: Mohammad Karim

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13D</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Honeywell W7751H and Siemens 540-844 controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

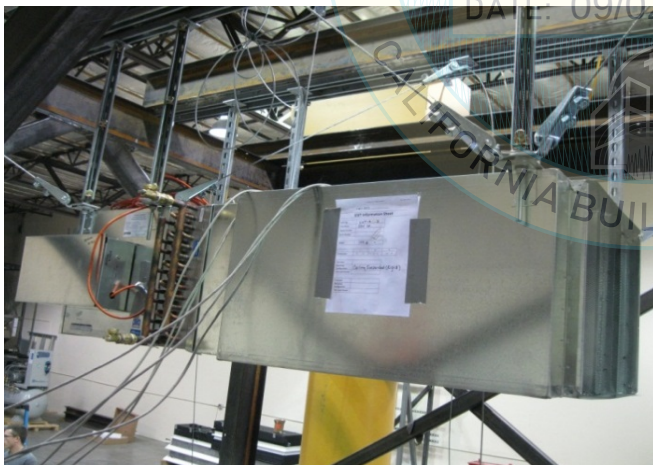
**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13E</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Honeywell W7751H and Siemens 540-844 controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                    |                             |         |       |        |                               |            |            |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|-------|--------|-------------------------------|------------|------------|------------|
| Manufacturer: Price Industries Limited                                                                                                                                                                             |                             |         |       |        |                               | UUT 13F    |            |            |
| Product Line: Air Handling Units                                                                                                                                                                                   |                             |         |       |        |                               |            |            |            |
| Model Number: SDVQ 16                                                                                                                                                                                              |                             |         |       |        |                               |            |            |            |
| Product Construction Summary:<br>Zinc-coated steel cabinet                                                                                                                                                         |                             |         |       |        |                               |            |            |            |
| Options / Component Summary:<br>4 row water coil; SM/PM liner and AFPM liner; Honeywell PVL6436AS and TAX Xenta 102-AX controllers; Straight 3 ft silencer w/ FC liner                                             |                             |         |       |        |                               |            |            |            |
| Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                             |         |       |        |                               |            |            |            |
| UUT Properties                                                                                                                                                                                                     |                             |         |       |        |                               |            |            |            |
| Operating Weight (lb)                                                                                                                                                                                              | Cabinet Dimensions (inches) |         |       |        | Lowest Natural Frequency (Hz) |            |            |            |
|                                                                                                                                                                                                                    | Length w/ Access Section    | Length  | Width | Height | Front-Back                    | Side-Side  | Vertical   |            |
| 177                                                                                                                                                                                                                | 35 5/8                      | 23 5/8  | 24    | 18     | N/A                           | N/A        | N/A        |            |
| Seismic Test Parameters                                                                                                                                                                                            |                             |         |       |        |                               |            |            |            |
| Building Code                                                                                                                                                                                                      | Test Criteria               | Sds (g) | z/h   | Ip     | Aflx-H (g)                    | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
| CBC 2019                                                                                                                                                                                                           | ICC-ES AC156                | 2.50    | 1.0   | 1.5    | 4.00                          | 3.00       | 1.67       | 0.67       |

BY: Mohammad Karim

## Unit Mounting Description:



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13G</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Siemens 550-068 and Price PIC controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 13H</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4 row water coil; SM/PM liner and AFPM liner; Johnson MS-VMA-1620 and Honeywell W7751F controllers; Straight 3 ft silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 177                   | 35 5/8                      | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively), each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 14A</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDV 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

4-row water coil; SM/PM liner and AFPM liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 81                    | n/a                         | 23 5/8 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal brackets, model 222628-001, each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 8-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 15A</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 4

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

1 row water coil; FF / FB liner; Siemens 540-100 controller; Elbow silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 60                    | 32 1/2                      | 22 1/8 | 12    | 8      | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal brackets, model 222628-001, each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to the interface frame with strut nuts and the Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 15B</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDVQ 4

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

1 row water coil; FF / FB liner; Siemens 540-100 controller; Elbow silencer w/ FC liner

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Access Section    | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 60                    | 32 1/2                      | 22 1/8 | 12    | 8      | N/A                           | N/A       | N/A      |

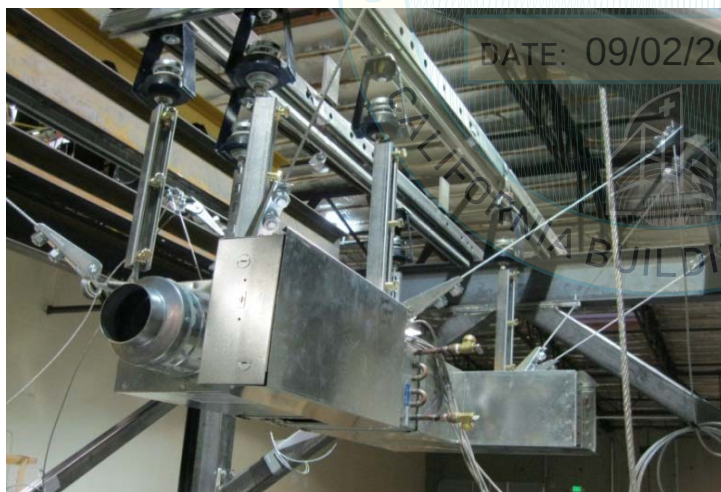
**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim

DATE: 09/02/2021



Unit was ceiling-suspended (with spring isolators) from the DCL shake table interface frame using 3/8-inch diameter threaded rod, SCBH Mason brackets, and 3/16-inch diameter steel cable. The threaded rod was attached to the unit using manufacturer-supplied terminal brackets, model 222628-001, each connected to the unit with four #8 sheet metal screws, as shown in the above photograph (right). The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 10-inches on-center. The rod was attached to Mason RW30N-B-138 spring isolators, which were in turn attached to the interface frame with strut nuts. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 16</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** FFU 2 x 2

**Product Construction Summary:**

Painted aluminum cabinet

**Options / Component Summary:**

10" duct inlet, 120V 1/3 HP motor with fan, HEPA filter, controller, aerosol test system, static pressure port, LED kit (filter and motor indicator options), and filter and motor building automation signal options

**Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.**

**UUT Properties**

| Operating Weight (lb) | Overall Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Depth                       | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 60                    | 23 3/4                      | 23 3/4 | 18 7/8 | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



The unit was suspended from the DCL steel shake table interface ceiling fixture with 3/8-inch diameter all-thread rod using four Price-supplied model P50 brackets on top of the unit. The threaded rod was stiffened with 1-5/8-inch channel, using three clips per stiffener. The threaded rod was spaced at 20 - 5/8 inches on-center. Lateral bracing was comprised of 3/16-inch diameter steel cable with Mason SCB2 brackets. The Mason brackets were attached to the DCL fixture with 3/8-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 17</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** FFU 2 x 4

**Product Construction Summary:**

Painted aluminum cabinet

**Options / Component Summary:**

12" duct inlet, 120V 1/3 HP motor with fan, HEPA filter, controller, aerosol test system, static pressure port, LED kit (filter and motor indicator options), and filter and motor building automation signal options

**Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.**

**UUT Properties**

| Operating Weight (lb) | Overall Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Depth                       | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 74                    | 47 3/4                      | 23 3/4 | 18 1/8 | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



The unit was suspended from the DCL steel shake table interface ceiling fixture with 3/8-inch diameter all-thread rod using two Price-supplied model P50 brackets and two model P51 brackets on top of the unit. The threaded rod was stiffened with 1-5/8-inch channel, using three clips per stiffener. The threaded rod was spaced at 43 - 1/2" inches on-center. Lateral bracing was comprised of 3/16-inch diameter steel cable with Mason SCB2 brackets. The Mason brackets were attached to the DCL fixture with 3/8-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 18A</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDV 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

Fiberglass liner, two Automated Logic ZN341V+ controllers, 24V with 120V transformer

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Duct Attachment   | Length | Width | Height | Front-Back                    | Side-Side | Vertical |
| 42                    | 23 5/8"                     | 19 1/2 | 24    | 18     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



The unit was suspended from the DCL shake table interface frame using 3/8-inch diameter all-thread rod and four manufacturer-provided 12-gage 90-degree brackets, model 222628-001, each attached to the unit with four #8 SMS. The threaded rod was spaced at 22" in the long direction of the unit, and the unit was hung 16.5" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCBH-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 18B</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDV 16

**Product Construction Summary:**

Zinc-coated steel cabinet

**Options / Component Summary:**

Fiberglass liner, two Automated Logic ZN341V+ controllers, 24V with 120V transformer

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |         |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|---------|-------|--------|-------------------------------|-----------|----------|
|                       | Length w/ Duct Attachment   | Length  | Width | Height | Front-Back                    | Side-Side | Vertical |
| 42                    | 23 5/8"                     | 19 1/2" | 24"   | 18"    | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



The unit was suspended from the DCL shake table interface frame using four Mason hangers, Model RW30N-B-138, 3/8-inch diameter all-thread rod and four manufacturer-provided 12-gage 90-degree brackets, model 222628-001, each attached to the unit with four #8 SMS. The threaded rod was spaced at 22" in the long direction of the unit, and the unit was hung 16.5" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCBH-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 19A</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** FFU-HE 2x4

**Product Construction Summary:**

Stainless steel cabinet

**Options / Component Summary:**

Aluminum duct inlet, 1/3 HP 115/240V motor, forward curved fan wheel, RSR filter, BACnet Flow Controller, contactor, aerosol test system and static pressure port

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

| UUT Properties          |                             |         |        |        |                               |            |            |            |
|-------------------------|-----------------------------|---------|--------|--------|-------------------------------|------------|------------|------------|
| Operating Weight (lb)   | Cabinet Dimensions (inches) |         |        |        | Lowest Natural Frequency (Hz) |            |            |            |
|                         | Length w/ Duct Attachment   | Length  | Width  | Height | Front-Back                    | Side-Side  | Vertical   |            |
| 96                      | n/a                         | 47 7/8  | 23 7/8 | 19 1/4 | N/A                           | N/A        | N/A        |            |
| Seismic Test Parameters |                             |         |        |        |                               |            |            |            |
| Building Code           | Test Criteria               | Sds (g) | z/h    | Ip     | Aflx-H (g)                    | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
| CBC 2019                | ICC-ES AC156                | 2.00    | 1.0    | 1.5    | 3.20                          | 2.40       | 1.67       | 0.67       |
|                         |                             | 2.50    | 0.0    | 1.5    |                               |            |            |            |

**Unit Mounting Description:**

BY: Mohammad Karim



The unit was suspended from the DCL shake table interface frame using four brackets integral to the test unit, 3/8-inch diameter all-thread rod. The threaded rod was spaced at 46" in the long direction of the unit, and the unit was hung 16" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCB-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 19B</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** FFU-HE 2x4

**Product Construction Summary:**

Stainless steel cabinet

**Options / Component Summary:**

Aluminum duct inlet, 1/3 HP 115V motor, forward curved fan wheel, RSR filter, BACnet Flow Controller, contactor, aerosol test system and static pressure port

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

| UUT Properties          |                             |         |        |        |                               |            |            |            |
|-------------------------|-----------------------------|---------|--------|--------|-------------------------------|------------|------------|------------|
| Operating Weight (lb)   | Cabinet Dimensions (inches) |         |        |        | Lowest Natural Frequency (Hz) |            |            |            |
|                         | Length w/ Duct Attachment   | Length  | Width  | Height | Front-Back                    | Side-Side  | Vertical   |            |
| 96                      | n/a                         | 47 7/8  | 23 7/8 | 19 1/4 | N/A                           | N/A        | N/A        |            |
| Seismic Test Parameters |                             |         |        |        |                               |            |            |            |
| Building Code           | Test Criteria               | Sds (g) | z/h    | Ip     | Aflx-H (g)                    | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
| CBC 2019                | ICC-ES AC156                | 2.00    | 1.0    | 1.5    | 3.20                          | 2.40       | 1.67       | 0.67       |
|                         |                             | 2.50    | 0.0    | 1.5    |                               |            |            |            |

**Unit Mounting Description:**

BY: Mohammad Karim



The unit was suspended from the DCL shake table interface frame using four brackets integral to the test unit, 3/8-inch diameter all-thread rod. The threaded rod was spaced at 46" in the long direction of the unit, and the unit was hung 16" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCB-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 19C</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** FFU-HE 2x4

**Product Construction Summary:**

Stainless steel cabinet

**Options / Component Summary:**

Aluminum duct inlet, 1/3 HP 240V motor, forward curved fan wheel, RSR filter, BACnet Flow Controller, contactor, aerosol test system and static pressure port

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

| UUT Properties          |                             |         |        |        |                               |            |            |            |
|-------------------------|-----------------------------|---------|--------|--------|-------------------------------|------------|------------|------------|
| Operating Weight (lb)   | Cabinet Dimensions (inches) |         |        |        | Lowest Natural Frequency (Hz) |            |            |            |
|                         | Length w/ Duct Attachment   | Length  | Width  | Height | Front-Back                    | Side-Side  | Vertical   |            |
| 96                      | n/a                         | 47 7/8  | 23 7/8 | 19 1/4 | N/A                           | N/A        | N/A        |            |
| Seismic Test Parameters |                             |         |        |        |                               |            |            |            |
| Building Code           | Test Criteria               | Sds (g) | z/h    | Ip     | Aflx-H (g)                    | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
| CBC 2019                | ICC-ES AC156                | 2.00    | 1.0    | 1.5    | 3.20                          | 2.40       | 1.67       | 0.67       |
|                         |                             | 2.50    | 0.0    | 1.5    |                               |            |            |            |

**Unit Mounting Description:**

BY: Mohammad Karim



The unit was suspended from the DCL shake table interface frame using four brackets integral to the test unit, 3/8-inch diameter all-thread rod. The threaded rod was spaced at 46" in the long direction of the unit, and the unit was hung 16" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCB-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             | <b>UUT 20</b> |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |               |
| <b>Model Number:</b> FFU-HE 2x4                                                                                                                                                                                           |               |
| <b>Product Construction Summary:</b><br>Aluminum cabinet                                                                                                                                                                  |               |
| <b>Options / Component Summary:</b><br>Aluminum duct inlet, 1/5 HP 115V motor, backward curved fan wheel, BTR filter, Universal Speed Controller, contactor, static pressure port                                         |               |
| <b>Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.</b> |               |

| UUT Properties          |                             |         |        |        |                               |            |            |
|-------------------------|-----------------------------|---------|--------|--------|-------------------------------|------------|------------|
| Operating Weight (lb)   | Cabinet Dimensions (inches) |         |        |        | Lowest Natural Frequency (Hz) |            |            |
|                         | Length w/ Duct Attachment   | Length  | Width  | Height | Front-Back                    | Side-Side  | Vertical   |
| 66                      | n/a                         | 47 7/8  | 23 7/8 | 17 2/5 | N/A                           | N/A        | N/A        |
| Seismic Test Parameters |                             |         |        |        |                               |            |            |
| Building Code           | Test Criteria               | Sds (g) | z/h    | Ip     | Aflx-H (g)                    | Arig-H (g) | Arig-V (g) |
| CBC 2019                | ICC-ES AC156                | 2.00    | 1.0    | 1.5    | 3.20                          | 2.40       | 1.67       |
|                         |                             | 2.50    | 0.0    | 1.5    |                               |            |            |

## Unit Mounting Description:

BY: Mohammad Karim



The unit was suspended from the DCL shake table interface frame using four brackets integral to the test unit, 3/8-inch diameter all-thread rod. The threaded rod was spaced at 46" in the long direction of the unit, and the unit was hung 16" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCB-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             | <b>UUT 21</b> |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |               |
| <b>Model Number:</b> FFU-HE 2x2                                                                                                                                                                                           |               |
| <b>Product Construction Summary:</b><br>Painted aluminum cabinet                                                                                                                                                          |               |
| <b>Options / Component Summary:</b><br>Aluminum duct inlet, 1/5 HP 277V motor, forward curved fan wheel, RSR filter, Universal Speed Controller, contactor, static pressure port                                          |               |
| <b>Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.</b> |               |

| UUT Properties           |                             |         |        |        |                               |            |            |            |
|--------------------------|-----------------------------|---------|--------|--------|-------------------------------|------------|------------|------------|
| Operating Weight<br>(lb) | Cabinet Dimensions (inches) |         |        |        | Lowest Natural Frequency (Hz) |            |            |            |
|                          | Length w/ Duct Attachment   | Length  | Width  | Height | Front-Back                    | Side-Side  | Vertical   |            |
| 54                       | n/a                         | 23 2/3  | 23 2/3 | 19 1/4 | N/A                           | N/A        | N/A        |            |
| Seismic Test Parameters  |                             |         |        |        |                               |            |            |            |
| Building Code            | Test Criteria               | Sds (g) | z/h    | Ip     | Aflx-H (g)                    | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
| CBC 2019                 | ICC-ES AC156                | 2.00    | 1.0    | 1.5    | 3.20                          | 2.40       | 1.67       | 0.67       |
|                          |                             | 2.50    | 0.0    | 1.5    |                               |            |            |            |

## Unit Mounting Description:

BY: Mohammad Karim



The unit was suspended from the DCL shake table interface frame using four brackets integral to the test unit, 3/8-inch diameter all-thread rod. The threaded rod was spaced at 22" in the long direction of the unit, and the unit was hung 16" from the underside of the shake table interface frame ceiling. The threaded rod was stiffened using 1-5/8" slotted channel with A307 rod stiffener clips spaced at 6 inches on center. Lateral bracing consisted of 3/16-inch diameter steel cable and Mason SCB-2/SSB-2 brackets. The Mason brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |               |
|-----------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 22</b> |
| <b>Product Line:</b> Air Handling Units       |               |

**Model Number:** ACBL HE 24x108

**Product Construction Summary:**

Powder-coated carbon steel

**Options / Component Summary:**

2-row 4-pipe water coils, bar grill face with no wings (Gen 3)

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 153                   | 107 3/4                     | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



The unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (8 pieces), spaced at a maximum of 37 inches on-center. Grade 5 nuts, 3/8-inch spring nuts and 16-inch long rod stiffeners, consisting of strut and rod stiffening clips, were used. Lateral bracing consisted of 8 SCB1 and SCBH1 brackets and 3/16 inch diameter steel cable. The unit was suspended approximately 18 inches from the top of the shake table interface frame.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             | <b>UUT 23</b> |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |               |
| <b>Model Number:</b> ACBL HE 24x120                                                                                                                                                                                       |               |
| <b>Product Construction Summary:</b><br>Powder-coated carbon steel                                                                                                                                                        |               |
| <b>Options / Component Summary:</b><br>2-row 4-pipe water coils, perforated face with no wings (Gen 3)                                                                                                                    |               |
| <b>Note:</b> The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |               |

## UUT Properties

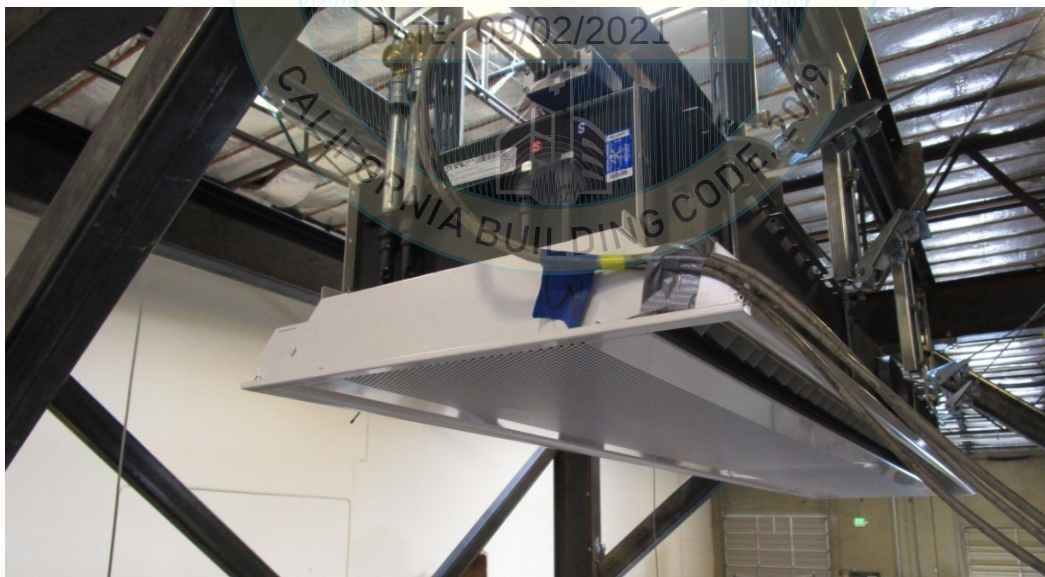
| Operating Weight (lb) | Cabinet Dimensions (inches) |        |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|--------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width  | Height | Front-Back                    | Side-Side | Vertical |
| 172                   | 119 3/4                     | 23 3/4 | 10     | N/A                           | N/A       | N/A      |

## Seismic Test Parameters

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

## Unit Mounting Description:

BY: Mohammad Karim



The unit was ceiling-suspended from the DCL shake table interface frame using 3/8-inch diameter threaded rod (8 pieces), spaced at a maximum of 37 inches on-center. Grade 5 nuts, 3/8-inch spring nuts and 16-inch long rod stiffeners, consisting of strut and rod stiffening clips, were used. Lateral bracing consisted of 8 SCB1 and SCBH1 brackets and 3/16 inch diameter steel cable. The unit was suspended approximately 18 inches from the top of the shake table interface frame.



# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 24A</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDV 4

**Product Construction Summary:**

Powder-coated carbon steel

**Options / Component Summary:**

Electric coil sz. 4; fiberglass liner; Price PIC controller with actuator

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight (lb) | Cabinet Dimensions (inches) |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|-------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width | Height | Front-Back                    | Side-Side | Vertical |
| 49                    | 42 1/4                      | 12    | 8      | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**



Unit was ceiling-suspended from the DCL shake table interface frame using (4) lengths of 1/2-inch diameter threaded rod (17" vertical drop and distances between attachment points varying from 15" to 32" on each side), VMC SB-125 brackets, and 3/16-inch diameter steel cable. Each threaded rod was attached to the unit using 1/2-inch Grade 5 nuts and washers, 1/4"x1-1/2"x1-1/2" carbon steel plate washer, and manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively). Each manufacturer supplied bracket was connected to the unit with four #8 sheet metal screws. The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 7-inches on-center. The rod was attached to the interface frame with strut nuts and the SB-125 brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited | <b>UUT 24B</b> |
| <b>Product Line:</b> Air Handling Units       |                |

**Model Number:** SDV 4

**Product Construction Summary:**

Powder-coated carbon steel

**Options / Component Summary:**

Electric coil sz. 4; fiberglass liner; Price PIC controller with actuator

**Note:** The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

**UUT Properties**

| Operating Weight<br>(lb) | Cabinet Dimensions (inches) |       |        | Lowest Natural Frequency (Hz) |           |          |
|--------------------------|-----------------------------|-------|--------|-------------------------------|-----------|----------|
|                          | Length                      | Width | Height | Front-Back                    | Side-Side | Vertical |
| 49                       | 42 1/4                      | 12    | 8      | N/A                           | N/A       | N/A      |

**Seismic Test Parameters**

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

**Unit Mounting Description:**

BY: Mohammad Karim



Unit was ceiling-suspended with VMC HSP-1C-50 spring isolators from the DCL shake table interface frame using (4) lengths of 1/2-inch diameter threaded rod (17" vertical drop and distances between attachment points varying from 15" to 32" on each side), VMC SB-125 brackets, and 3/16-inch diameter steel cable. Each threaded rod was attached to the unit using 1/2-inch Grade 5 nuts and washers, 1/4"x1-1/2"x1-1/2" carbon steel plate washer, and manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively). Each manufacturer supplied bracket was connected to the unit with four #8 sheet metal screws. The rod was attached to the spring isolators, which were in turn attached to the interface frame with strut nuts. The SB-125 brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             | <b>UUT 25A</b> |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |                |
| <b>Model Number:</b> SDVQ 24 x 16                                                                                                                                                                                         |                |
| <b>Product Construction Summary:</b><br>Powder-coated carbon steel                                                                                                                                                        |                |
| <b>Options / Component Summary:</b><br>Electric coil sz. 24x16; solid metal liner (22 ga. zinc-coated carbon steel); 5' silencer; Price PIC controller with actuator                                                      |                |
| <b>Note:</b> The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                |

## UUT Properties

| Operating Weight (lb) | Cabinet Dimensions (inches) |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|-------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width | Height | Front-Back                    | Side-Side | Vertical |
| 350                   | 38.5*                       | 38    | 18     | N/A                           | N/A       | N/A      |

\*Total length with tested 5-foot silencer is 100".

## Seismic Test Parameters

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

## Unit Mounting Description:



Unit was ceiling-suspended from the DCL shake table interface frame using (8) lengths of 1/2-inch diameter threaded rod (17" vertical drop and distances between attachment points varying from 12" to 52" on each side), VMC SB-125 brackets, and 3/16-inch diameter steel cable. Each threaded rod was attached to the unit using 1/2-inch Grade 5 nuts and washers, 1/4"x1-1/2"x1-1/2" carbon steel plate washer, and manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively). Each manufacturer supplied bracket was connected to the unit with four #8 sheet metal screws. The threaded rod was stiffened with slotted A-12 channel and rod stiffening clips spaced at approximately 7-inches on-center. The rod was attached to the interface frame with strut nuts and the SB-125 brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.

# UNIT UNDER TEST (UUT) SUMMARY SHEET



DCL Project No. 21854-2001

|                                                                                                                                                                                                                           |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Manufacturer:</b> Price Industries Limited                                                                                                                                                                             | <b>UUT 25B</b> |
| <b>Product Line:</b> Air Handling Units                                                                                                                                                                                   |                |
| <b>Model Number:</b> SDVQ 24 x 16                                                                                                                                                                                         |                |
| <b>Product Construction Summary:</b><br>Powder-coated carbon steel                                                                                                                                                        |                |
| <b>Options / Component Summary:</b><br>Electric coil sz. 24x16; solid metal liner (22 ga. zinc-coated carbon steel); 5' silencer; Price PIC controller with actuator                                                      |                |
| <b>Note:</b> The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained. |                |

## UUT Properties

| Operating Weight (lb) | Cabinet Dimensions (inches) |       |        | Lowest Natural Frequency (Hz) |           |          |
|-----------------------|-----------------------------|-------|--------|-------------------------------|-----------|----------|
|                       | Length                      | Width | Height | Front-Back                    | Side-Side | Vertical |
| 350                   | 38 1/2                      | 38    | 18     | N/A                           | N/A       | N/A      |

\*Total length with tested 5-foot silencer is 100".

## Seismic Test Parameters

| Building Code | Test Criteria | Sds (g) | z/h | Ip  | Aflx-H (g) | Arig-H (g) | Aflx-V (g) | Arig-V (g) |
|---------------|---------------|---------|-----|-----|------------|------------|------------|------------|
| CBC 2019      | ICC-ES AC156  | 2.50    | 1.0 | 1.5 | 4.00       | 3.00       | 1.67       | 0.67       |

## Unit Mounting Description:



UUT25b was ceiling-suspended with VMC HSP-1C-100 spring isolators from the DCL shake table interface frame using (8) lengths of 1/2-inch diameter threaded rod (17" vertical drop and distances between attachment points varying from 12" to 52" on each side), VMC SB-125 brackets, and 3/16-inch diameter steel cable. Each threaded rod was attached to the unit using 1/2-inch Grade 5 nuts and washers, 1/4"x1-1/2"x1-1/2" carbon steel plate washer, and manufacturer-supplied terminal and shear brackets (model 222628-001 and 222628-002, respectively). Each manufacturer supplied bracket was connected to the unit with four #8 sheet metal screws. The rod was attached to the spring isolators, which were in turn attached to the interface frame with strut nuts and the SB-125 brackets were attached to the interface frame with 1/2-inch diameter Grade 5 bolts.