APPLICATION FOR OSHPD SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0725

OSHPD Special Seismic Certification Preapproval (OSP)

Type: [X] New [ ] Renewal

Manufacturer Information

Manufacturer: Johnson Controls, Inc

Manufacturer's Technical Representative: Tony Reardon

Mailing Address: 5005 York Dr., Norman, OK 73069

Telephone: (405) 200-8082 Email: Anthony.J.Reardon@jci.com

Product Information

Product Name: Air Conditioning Units

Product Type: Air Conditioning Units - Packaged

Product Model Number: Johnson Controls Choice 15 to 27.5 Ton

General Description: Standard efficiency down flow roof top unit

Mounting Description: Rigid or Isolated Curb Mounted at Base

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: Dynamic Certifications Laboratories

Contact Person: Kelly Laplace

Mailing Address: 1315 Greg Parkway #109, Sparks, NV 89431

Telephone: (775) 358-5085 Email: kelly@shaketest.com

Title: Business Manager

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

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.46 (Rigid Curb) & 4.39 (Isolated Curb)

S_{DS} (Design spectral response acceleration at short period, g) = 1.95

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6 (Rigid Curb) & 2 (Isolated Curb)

Ω_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 01/14/2028

Date: 1/18/2022

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: S_{DS} (g) = 1.95 z/h = 1

Condition of Approval (if applicable):

Table 1- Special Seismic Certification
Certified Component Matrix

DCL Project No. 37697-2101

Manufacturer: York (Johnson Controls)

Product Line: Choice (Midas) Standard Efficiency Down Flow

Product Construction: Powder Coated Carbon Steel Enclosure

Test Levels: Sds = 1.95g, z/h = 1.0

Model Number[1]	Product Line	Dimensions (inches)			Max. Operating Weight (lb)	Nominal Cooling Capacity (Tons)	Tested Heat	Tested Unit Mounting	Unit
		Depth	Width	Height					
AD15E1BV2D1A3T37H1	Choice	130.0	89.0	52.0	2040	15.0	Electric	Rigid Curb Mount	UUT-01
AD15T3BHBN4LKL41A1		131.0	89.0	51.0	2170	15.0	Gas	Rigid Curb Mount	UUT-02
xx18xxxxxxxxxxx		129.8	88.8	49.2	2300	17.5	N/A	N/A	Interpolated
xx20xxxxxxxxxxx		143.8	88.8	49.2	2450	20.0	N/A	N/A	Interpolated
xx28xxxxxxxxxxx		160.1	88.8	57.2	2570	27.5	N/A	N/A	Interpolated
AD28N3DHEA4AAL31A1		160.0	89.0	60.0	2570	27.5	Gas	Isolated Curb Mount	UUT-04
xx25xxxxxxxxxxx		143.8	88.8	57.2	2900	25.0	N/A	N/A	Interpolated
AD25E3BS5T1K3T47H1		144.0	89.0	58.0	2900	25.0	Electric	Isolated Curb Mount	UUT-03

1. The Variable "x" denotes different options as described in the Nomenclature Charts in Tables 2 and 3.

Table 2- Special Seismic Certification
Model Number Nomenclature Chart
DCL Project No. 37697-2101

Manufacturer: York (Johnson Controls)
Product Line: Choice (Midas) Standard Efficiency Down Flow
Test Levels: Sds = 1.95g, z/h = 1.0

Sample Part Number

A	D	25	N	0	B	V	2	A	1	C	A	A	1	4	A
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Character	Category	Allowable Value	Description	Justification for Interpolation/ Extrapolation	Tested Unit Mounting	Unit
1	Package	A	York or JCI AC	N/A	Rigid and Isolated Curb	UUT-01,-02,-03,-04
		C	Branded or TempMaster AC	Same as UUT-01,-02,-03,-04 (branding)	N/A	Extrapolated
2	Efficiency	V	Standard Efficiency, Vertical, York or TempMaster	Same as UUT-01,-02,-03,-04 (branding)	N/A	Extrapolated
		D	Standard Efficiency, Vertical, Branded or JCI	N/A	Rigid and Isolated Curb	UUT-01,-02,-03,-04
3	Capacity	15	15 ton	N/A	Rigid Curb	UUT-01,-02
		18	17.5 ton	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		20	20 ton	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		25	25 ton	N/A	Isolated Curb	UUT-03
		28	27.5 ton	N/A	Isolated Curb	UUT-04
4	Heat Type	C	Cooling Only	Depopulated version of UUT-01,-02,-03,-04	N/A	Extrapolated
		T	Modulating Gas Heat with SS Heat Exchangers	N/A	Rigid Curb	UUT-02
		N	Natural Gas, Staged Gas Heat with aluminized Heat Exchangers	N/A	Isolated Curb	UUT-04
		S	Natural Gas, Staged Gas Heat with SS Heat Exchangers	Depopulated version of UUT-02	N/A	Interpolated
		E	Electric Heat	N/A	Rigid and Isolated Curb	UUT-01,-03
5	Heat Size	0	Cooling Only	Depopulated version of UUT-01,-02,-03,-04	N/A	Extrapolated
		1	Low Heat	N/A	Rigid and Isolated Curb	UUT-01
		2	Medium Heat	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		3	High Heat/mod heat	N/A	Rigid and Isolated Curb	UUT-02,-03,-04
6	Blower	B	Standard	N/A	Rigid and Isolated Curb	UUT-01,-02,-03
		C	Medium	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		D	High	N/A	Isolated Curb	UUT-04
7	Air Volume	H	VFD/VAV 4 Stage	N/A	Rigid and Isolated Curb	UUT-02,-04
		K	VFD/VAV with Bypass 4 Stage	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		L	VFD/VAV Customer Supplied 4 Stage	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		P	IntelliSpeed 2 Stage	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		Q	IntelliSpeed 4 Stage	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		R	IntelliSpeed with Bypass 2 Stage	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		S	IntelliSpeed with Bypass 4 Stage	N/A	Rigid Curb	UUT-03
		V	Constant Volume	N/A	Rigid and Isolated Curb	UUT-01
8	Voltage	2	208/230-3-60	N/A	Rigid and Isolated Curb	UUT-01
		4	460-3-60	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		5	575-3-60	Bookended by UUT-02,-04	N/A	UUT-03
		B	208/230-3-60 HIGH SCCR	Depopulated version of UUT-01,-03	N/A	UUT-02
		D	460-3-60 HIGH SCCR	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		E	575-3-60 HIGH SCCR	N/A	Rigid and Isolated Curb	UUT-04
9	Outdoor Air	A	No Economiser	N/A	Isolated Curb	UUT-04
		B	Manual Damper	Depopulated version of UUT-01,-04	N/A	Interpolated
		C	Motorized damper	Depopulated version of UUT-01	N/A	Interpolated
		D	Motorized damper with barometric relief (baro)	N/A	Rigid Curb	UUT-01
		E	Economiser with Barometric Relief	Depopulated version of UUT-01,-02	N/A	Interpolated
		F	Economiser with Modulating Power Exhaust	Depopulated version of UUT-01,-02	N/A	Interpolated
		G	Economiser with Power Exhaust	Depopulated version of UUT-01,-02	N/A	Interpolated
		H	Economiser BAS with Barometric Relief	Depopulated version of UUT-01,-02	N/A	Interpolated
		J	Economiser BAS with Modulating Power Exhaust	Depopulated version of UUT-01,-02	N/A	Interpolated
		K	Economiser BAS with Power Exhaust	Depopulated version of UUT-01,-02	N/A	Interpolated
		L	Economiser with Baromatric Relief, Single Enthalpy	Depopulated version of UUT-01,-02	N/A	Interpolated
		M	Economiser with Modulating Power Exhaust, Single Enthalpy	Depopulated version of UUT-01,-02	N/A	Interpolated
		N	Economiser with Power Exhaust, Single Enthalpy	N/A	Rigid Curb	UUT-02
		S	Economiser with Barometric Relief, Dual Enthalpy	Depopulated version of UUT-02,-03	N/A	Interpolated
		T	Economiser with Modulating Power Exhaust, Dual Enthalpy	N/A	Isolated Curb	UUT-03
		U	Economiser with Power Exhaust, Dual Enthalpy	Depopulated version of UUT-02,-03	N/A	Interpolated
10	Coils	1	Standard Condenser and Evaporator Coil	N/A	Rigid and Isolated Curb	UUT-01,-03
		2	Standard Condenser and ElectroFin Evaporator Coil	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		3	ElectroFin Condenser & Standard EVAP Coil	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		4	ElectroFin Condenser & ElectroFin Evap Coil	N/A	Rigid and Isolated Curb	UUT-02,-04
11	Controls	A	Smart Equipment Controls	N/A	Rigid and Isolated Curb	UUT-01,-04
		C	Smart Equipment with COM	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		J	VERASYS SINGLE ZONE	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		K	VERASYS Change over Bypass	N/A	Isolated Curb	UUT-03
		L	VERASYS VAV	N/A	Rigid Curb	UUT-02

Table 3- Special Seismic Certification
Model Number Nomenclature Chart (Continued)
DCL Project No. 37697-2101
Manufacturer: York (Johnson Controls)
Product Line: Choice (Midas) Standard Efficiency Down Flow
Test Levels: Sds = 1.95g, z/h = 1.0

Sample Part Number

A	D	25	N	0	B	V	2	A	1	C	A	A	1	4	A
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Character	Category	Allowable Value	Description	Justification for Interpolation/ Extrapolation	Tested Unit Mounting	Unit
12	Sensors	A	NO SENSORS	N/A	Isolated Curb	UUT-04
		B	AIR PROVING SWITCH (APS)	Bookended by UUT-01,-03,-04	N/A	Interpolated
		C	DIRTY FILTER SWITCH (DFS)	Bookended by UUT-01,-03,-04	N/A	Interpolated
		D	SUPPLY AIR SMOKE DETECT (SSD)	Bookended by UUT-01,-03,-04	N/A	Interpolated
		E	RETURN AIR SMOKE DETECT (RSD)	Bookended by UUT-01,-03,-04	N/A	Interpolated
		F	CO2 SENSOR (CO2)	Bookended by UUT-02,-04	N/A	Interpolated
		G	APS, DFS	Bookended by UUT-01,-03,-04	N/A	Interpolated
		H	APS, SSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		J	APS, RSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		K	APS, CO2	N/A	Rigid Curb	UUT-02
		L	DFS, SSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		M	DFS, RSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		N	DFS, CO2	Bookended by UUT-01,-02,-03	N/A	Interpolated
		P	SSD, RSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		Q	SSD, CO2	Bookended by UUT-01,-02,-03	N/A	Interpolated
		R	RSD, CO2	Bookended by UUT-01,-02,-03	N/A	Interpolated
		S	APS, DFS, SSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		T	APS, DFS, RSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		U	APS, DFS, CO2	Bookended by UUT-01,-03,-04	N/A	Interpolated
		V	APS, SSD, RSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		W	APS, SSD, CO2	Bookended by UUT-01,-03,-04	N/A	Interpolated
		X	APS, RSD, CO2	Bookended by UUT-01,-03,-04	N/A	Interpolated
		Y	DFS, SSD, RSD	Bookended by UUT-01,-03,-04	N/A	Interpolated
		Z	DFS, SSD, CO2	Bookended by UUT-01,-03,-04	N/A	Interpolated
		1	DFS, RSD, CO2	Bookended by UUT-01,-03,-04	N/A	Interpolated
		2	SSD, RSD, CO2	Bookended by UUT-01,-03,-04	N/A	Interpolated
		3	APS, DFS, SSD, RSD	N/A	Rigid and Isolated Curb	UUT-01,-03
		4	APS, DFS, SSD, CO2	Bookended by UUT-01,-03	N/A	Interpolated
		5	APS, DFS, RSD, CO2	Bookended by UUT-01,-03	N/A	Interpolated
		6	APS, SSD, RSD, CO2	Bookended by UUT-01,-03	N/A	Interpolated
		7	DFS, SSD, RSD, CO2	Bookended by UUT-01,-03	N/A	Interpolated
		8	APS, DFS, SSD, RSD, CO2	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
13	Service Options	A	No Service Options	Depopulated version of UUT-01,-02,-03,-04	N/A	Extrapolated
		B	Phase Monitor (PHM)	Bookended by UUT-01,-03	N/A	Interpolated
		C	Non-Power Convenience Outlet (NCO)	Bookended by UUT-02,-04	N/A	Interpolated
		D	Circuit Breaker (CB)	Bookended by UUT-02,-04	N/A	Interpolated
		E	Disconnect Switch (DSC)	Bookended by UUT-01,-03	N/A	Interpolated
		F	Powered Convenience Outlet (PCO)	Bookended by UUT-01,-03	N/A	Interpolated
		G	PHM, CB	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		H	PHM, DSC	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		J	PHM, NCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		K	PHM, PCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		L	CB, NCO	N/A	Rigid and Isolated Curb	UUT-02,-04
		M	CB, PCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		N	DSC, NCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		P	DSC, PCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		Q	PHM, CB, NCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		R	PHM, CB, PCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		S	PHM, DSC, NCO	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
		T	PHM, DSC, PCO	N/A	Rigid and Isolated Curb	UUT-01,-03
14	Refrigeration	1	STANDARD	Depopulated version of UUT-01,-02,-03,-04	N/A	Extrapolated
		3	Low Ambient Head Pressure Control (HPC)	N/A	Rigid and Isolated Curb	UUT-01,-04
		4	Modulating Hot Gas Reheat (HGR)	N/A	Rigid and Isolated Curb	UUT-02,-03
		6	HPC, HGR	Bookended by UUT-01,-02,-03,-04	N/A	Interpolated
15	Additional Options	1	Standard Throwaway Filter	N/A	Rigid and Isolated Curb	UUT-02,-04
		2	2" Pleated Filter MERV 8	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		4	4" Pleated Filter MERV 13	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		5	Standard Filter, Coil Guard (CG)	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		6	2" Pleated, CG	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		7	4" Pleated, CG	N/A	Rigid and Isolated Curb	UUT-01,-03
16	Cabinet Options	A	Standard Cabinet	N/A	Rigid and Isolated Curb	UUT-02,-04
		B	Hinged Access Panel (HAP)	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		C	Stainless Steel Drain Pan (SSD)	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		D	Condensate Overflow Switch (COF)	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		E	HAP, SSD	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		F	HAP, COF	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		G	SSD, COF	Depopulated version of UUT-01,-02,-03,-04	N/A	Interpolated
		H	HAP, SSD, COF	N/A	Rigid and Isolated Curb	UUT-01,-03

Table 4- Special Seismic Certification
Certified Subcomponent Matrix
Refigerant Compressors

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Refrigerant Compressor					
Model Number	**Manufacturer**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
HLJ083T2LC6	DANFOSS	Carbon Steel	91	Rigid Curb Mount	UUT-01
HLJ083T4LC6			91	N/A	Interpolated
HLJ083T7LC6			91	N/A	Interpolated
DSH140A3ALA			148	N/A	Interpolated
DSH140A4ALB			148	N/A	Interpolated
DSH140A7ALA			148	Isolated Curb Mount	UUT-03
ZPS83KCE-TFE	COPELAND	Carbon Steel	91	N/A	Extrapolated
ZPS83KCE-TF5			91	Rigid Curb Mount	UUT-02
ZPS83KCE-TFD			91	N/A	Interpolated
ZPS91KCE-TF5			91	N/A	Interpolated
ZPS91KCE-TFD			91	N/A	Interpolated
ZPS91KCE-TFE			91	N/A	Interpolated
ZP91KCE-TFD			91	N/A	Interpolated
ZP91KCE-TF5			91	N/A	Interpolated
ZP91KCE-TFE			91	N/A	Interpolated
ZP104KCE-TF5			108	N/A	Interpolated
ZP104KCE-TFD			108	N/A	Interpolated
ZP104KCE-TFE			108	N/A	Interpolated
ZP122KCE-TF5			108	N/A	Interpolated
ZP122KCE-TFD			108	N/A	Interpolated
ZP122KCE-TFE			108	N/A	Interpolated
ZPS104KCE-TF5			108	N/A	Interpolated
ZPS104KCE-TFD			108	N/A	Interpolated
ZPS104KCE-TFE			108	N/A	Interpolated
ZP154KCE-TE5			144	N/A	Interpolated
ZP154KCE-TED			144	N/A	Interpolated
ZP154KCE-TEE			144	N/A	Interpolated
ZPT134KCE-TF5			200	N/A	Interpolated
ZPT134KCE-TFD			200	N/A	Interpolated
ZPT134KCE-TFE			200	N/A	Interpolated
ZPT152KCE-TF5			200	N/A	Interpolated
ZPT152KCE-TFD			200	N/A	Interpolated
ZPT152KCE-TFE			200	Isolated Curb Mount	UUT-04

Table 5- Special Seismic Certification
Certified Subcomponent Matrix
Blower Motors

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Blower Motors							
Model Number	**Manufacturer**	**Voltage (V)**	**Power (HP)**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
5K49TN4851Z	REGAL BELOIT-MARATHON	230	2	Rolled Carbon Steel and Cast Iron	38	Rigid Curb Mount	UUT-01
5K49TN4856Z		575	2		38	N/A	Interpolated
5K49WN4852Z		460	3		44	N/A	Interpolated
5K49WN4857Z		575	3		44	N/A	Interpolated
5K49QN4853Z		208-460	5		54	N/A	Interpolated
5K49QN4858Z		575	5		54	N/A	Interpolated
213TTDBD6427		230/460	7.5		133	N/A	Interpolated
213TTDBD16427		575	7.5		133	N/A	Interpolated
215TTDBD6427		230/460	10		144	N/A	Interpolated
215TTDBD16427		575	10		143	N/A	Interpolated
215TTDBD6029		230/460	12		161	N/A	Interpolated
215TTDBD16029		575	12		161	Isolated Curb Mount	UUT-04
35E3753N700G1	BALDOR	208-460	2.9	Rolled Carbon Steel and Cast Iron	49	Rigid Curb Mount	UUT-02
35E3753N598G1		575	2.9		49	N/A	Interpolated
36Q222R428G1		208-460	3.7		68	N/A	Interpolated
36Q222T160G1		575	3.7		68	N/A	Interpolated
36P249T139G1		208-460	5.25		82	N/A	Interpolated
36P249T160G1		575	5.25		82	Isolated Curb Mount	UUT-03

Table 6- Special Seismic Certification
Certified Subcomponent Matrix
Outdoor Motors

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Outdoor Motors							
Model Number	**Manufacturer**	**Voltage (V)**	**Power (HP)**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
5KCP39MGLB50S	REGAL-BELOIT/GENTEQ	208-230	0.5	Rolled Carbon Steel and Cast Iron	18	N/A	Interpolated
5KCP39MGWC22S		460	0.5		18	N/A	Interpolated
5KCP39MGWC06S		575	0.5		18	N/A	Interpolated
5KCP39PFBD52BS		208-230	0.5		18	Rigid Curb Mount	UUT-01,-02
5KCP39PFBD74S		460	0.5		18	N/A	Interpolated
5KCP39PFBD75S		575	0.5		18	Isolated Curb Mount	UUT-04
Y7S623D5140	BROAD-OCEAN MOTOR	208-230	0.5	Rolled Carbon Steel and Cast Iron	18	Isolated Curb Mount	UUT-03
Y7S623D5141		460	0.5		18	N/A	Interpolated
Y7S623D5142		575	0.5		18	Isolated Curb Mount	UUT-03

Table 7- Special Seismic Certification
Certified Subcomponent Matrix
Condenser Coils

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Condenser Coils							
Model Number	**Manufacturer**	**Description**	**Dimensions (total ft^2)**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
X005-JC322	SANHUA	CONDENSER COIL, MICROCHANNEL,20MM X 44 X 72.01	22	Aluminum Alloy	41	Rigid Curb Mount	UUT-01,-02
X011-JC234		CONDENSER COIL, MICROCHANNEL,25MM X 44 X 72.01	22		48	N/A	Interpolated
X010-JC244		CONDENSER COIL, MICROCHANNEL,25MM X 44 X 82.01	25		55	N/A	Interpolated
X004-JC284		CONDENSER COIL, MICROCHANNEL,25MM X 51.9 X 85.3	31		66	Isolated Curb Mount	UUT-03
X004-JC285		CONDENSER COIL, MICROCHANNEL,25MM X 51.9 X 98.3	35		77	Isolated Curb Mount	UUT-04

Table 8- Special Seismic Certification
Certified Subcomponent Matrix
Evaporator Coils

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Evaporator Coils							
Model Number	**Manufacturer**	**Description[1]**	**Dimensions (total ft^2)**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
5747066	JCI	SB,EVAP COIL ASM,AV15	22	Aluminum, Carbon Steel & Copper	136	Rigid Curb Mount	UUT-01
5747067		SB,EVAP COIL ASM,AV18	22		182	N/A	Interpolated
5747068		SB,EVAP COIL ASM,AV20	22		182	N/A	Interpolated
5747069		SB,EVAP COIL ASM,AV25	26		215	Isolated Curb Mount	UUT-03
5747070		SB,EVAP COIL ASM,AV28	26		215	N/A	Interpolated
5747071		SB,EVAP COIL ASM & TXV,AV15,EF	22		136	Rigid Curb Mount	UUT-02
5747072		SB,EVAP COIL ASM & TXV,AV18,EF	22		182	N/A	Interpolated
5747073		SB,EVAP COIL ASM & TXV,AV20,EF	22		182	N/A	Interpolated
5747074		SB,EVAP COIL ASM & TXV,AV25,EF	26		215	N/A	Interpolated
5747075		SB,EVAP COIL ASM & TXV,AV28,EF	26		215	Isolated Curb Mount	UUT-04

1. EF stands for Electrofin

Table 9- Special Seismic Certification
Certified Subcomponent Matrix
Hot Gas Reheat Coils

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Hot Gas Reheat Coils							
Model Number	**Manufacturer**	**Description**	**Dimensions (total ft^2)**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
X004-JC337-4	SANHUA	MICROCHANNEL HOT GAS REHEAT COILS	12	Aluminum	24	Rigid Curb Mount	UUT-02
X003-JC337-1		MICROCHANNEL HOT GAS REHEAT COILS	15		31	Isolated Curb Mount	UUT-03

Table 10- Special Seismic Certification
Certified Subcomponent Matrix
Service Valves

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Service Valves						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
A17937	MUELLER	VALVE MAGNETIC CHECK 5/8" MAX 700PSI	Brass & Copper	1	Rigid Curb Mount	UUT-02
A17936		VALVE MAGNETIC CHECK 1/2" MAX 700PSI		1	Rigid and Isolated Curb Mount	UUT-02,-03
E5S130-HP	SPORLAN	VALVE, SOLENOID, 2-WAY 24V		2	Rigid and Isolated Curb Mount	UUT-02,-03
MTW-9 183907		VALVE, HOT GAS REHEAT 12V		2	Isolated Curb Mount	UUT-03

Table 11- Special Seismic Certification
Certified Subcomponent Matrix
Variable Frequency Drive

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Variable Frequency Drive						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
VFD11AMS23ANSAA	DELTA	VFD 3.0 HP 200-240V /3 /60	Plastic & Electronics Component	10	Rigid Curb Mount	UUT-02
VFD5A5MS43ANSAA		VFD 3.0 HP 380-480V /3 /60		10	N/A	Interpolated
VFD4A2MS53ANSAA		VFD 3 HP 575V/3/60		10	N/A	Interpolated
VFD17AMS23ANSAA		VFD 5.0 HP 200-240V /3 /60		10	N/A	Interpolated
VFD9A0MS43ANSAA		VFD 5.0 HP 380-480V /3 /60		10	N/A	Interpolated
VFD6A6MS53ANSAA		VFD 5.0 HP 575V /3 /60		10	Isolated Curb Mount	UUT-03
VFD25AMS23ANSAA		VFD 7.5 HP 200-240V /3 /60		15	N/A	Interpolated
VFD13AMS43ANSAA		VFD 7.5 HP 380-480V /3 /60		15	N/A	Interpolated
VFD9A9MS53ANSAA		VFD 7.5 HP 575V /3 /60		15	N/A	Interpolated
VFD33AMS23ANSAA		VFD 10.0 HP 200-240V /3 /60		20	N/A	Interpolated
VFD17AMS43ANSAA		VFD 10.0 HP 380-480V /3 /60		20	N/A	Interpolated
VFD12AMS53ANSAA		VFD 10.0 HP 575V /3 /60		20	Isolated Curb Mount	UUT-04
P266ACA-500C	JOHNSON CONTROLS	SINGLE-PHASE CONDENSER FAN SPEED CONTROL 208V/240V-1-60	Plastic & Electronics Component	2	Rigid Curb Mount	UUT-01
P266BCA-500C		SINGLE-PHASE CONDENSER FAN SPEED CONTROL 460V/575V-1-60		2	Isolated Curb Mount	UUT-04

Table 12- Special Seismic Certification
Certified Subcomponent Matrix
Economizers

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Economizer						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
8345052	RUSKIN ROOFTOP SYSTEMS	BAROMETRIC RELIEF FACTORY, C6-9	Galvanized Carbon Steel	50	Rigid Curb Mount	UUT-01
8330052		MANUAL OA DAMPER, 0-100%, FACTORY, C6/7		63	N/A	Interpolated
8330252		MOTORIZED OA DAMPER, 0-100%, FACTORY, C6/7		65	Rigid Curb Mount	UUT-01
8330054		MANUAL OA DAMPER, 0-100%, FACTORY, C8/9		73	N/A	Interpolated
8330254		MOTORIZED OA DAMPER, 0-100%, FACTORY, C8/9		75	N/A	Interpolated
8345552-21		POWER EXAUST, CV, FACTORY, 208-230V		75	Rigid Curb Mount	UUT-02
8345552-31		POWER EXAUST, CV, FACTORY, 460V		75	N/A	Interpolated
8345552-41		POWER EXAUST, CV, FACTORY, 575V		75	N/A	Interpolated
8345952-21		POWER EXAUST, MOD, FACTORY, 208-230V		75	Isolated Curb Mount	UUT-03
8345952-31		POWER EXAUST, MOD, FACTORY, 460V		75	N/A	Interpolated
8345952-41		POWER EXAUST, MOD, FACTORY, 575V		75	N/A	Interpolated
8336852		ECONOMIZER , BAS, FACTORY, 6/7		145	N/A	Interpolated
83368B52		ECONOMIZER , SE, FACTORY, 6/7		145	Rigid Curb Mount	UUT-02
8336854		ECONOMIZER , BAS, FACTORY, 8/9		165	N/A	Interpolated
83368B54		ECONOMIZER , SE, FACTORY, 8/9		165	Isolated Curb Mount	UUT-03

Table 13- Special Seismic Certification
Certified Subcomponent Matrix
Electric Heaters

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Electric Heater						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
110081607	BACKER EHP	ELECTRIC HEAT 25KW, 600V	Nickel Chrome Alloy and Galvanized Carbon Steel	47	N/A	Extrapolated
110081604		ELECTRIC HEAT 25KW, 480V		47	N/A	Extrapolated
110081601		ELECTRIC HEAT 25KW, 240V		50	Rigid Curb Mount	UUT-01
110081605		ELECTRIC HEAT 50KW, 480V		59	N/A	Interpolated
110081608		ELECTRIC HEAT 50KW, 600V		59	N/A	Interpolated
110081602		ELECTRIC HEAT 50KW, 240V		62	N/A	Interpolated
110081606		ELECTRIC HEAT 75KW, 480V		75	N/A	Interpolated
110081603		ELECTRIC HEAT 75KW, 240V		75	N/A	Interpolated
110081609		ELECTRIC HEAT 75KW, 600V		75	Isolated Curb Mount	UUT-03

Table 14- Special Seismic Certification
Certified Subcomponent Matrix
Gas Heater

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Gas Heater						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
5720196	JCI	SB,HEAT GAS, 5 TUBE, 220K, 2-STG, AL	Aluminized Carbon Steel	105	N/A	Extrapolated
5720198		SB,HEAT GAS, 9 TUBE, 400K, 2-STG, AL		155	Isolated Curb Mount	UUT-04
5720197		SB,HEAT GAS, 5 TUBE, 220K, 2-STG, SS	Stainless Steel	105	N/A	Extrapolated
5720205		SB,HEAT GAS, 9 TUBE, 400K, 2-STG, SS		155	N/A	Extrapolated
5720206		SB,HEAT GAS, 9 TUBE, 400K, MOD, SS		155	Rigid Curb Mount	UUT-02

Table 15- Special Seismic Certification
Certified Subcomponents Matrix
Filters

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Filters						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
276-200-250-058	KOCH FILTER CORPORATION	FILTER AIR THROWAWAY 2X20X25	Polypropylene Fibers	<1	Rigid Curb Mount	UUT-02
102-740-021		FILTER AIR PLEATED 2X20X25		<1	N/A	Interpolated
102-740-017		FILTER AIR PLEATED MERV8 2X16X25		<1	N/A	Interpolated
102-714-026		FILTER AIR PLEATED MERV13 2X16X25		<1	Isolated Curb Mount	UUT-03
102-714-030		FILTER AIR PLEATED 4X20X25		<1	Rigid Curb Mount	UUT-01
276-160-250		FILTER AIR THROWAWAY 2X16X25	Fiberglass	<1	Isolated Curb Mount	UUT-04

Table 16- Special Seismic Certification
Certified Subcomponent Matrix
Transformers

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Transformers					
Model Number	**Manufacturer**	**Description**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
HCT-09VE0BB26271	HARTLAND CONTROLS	TRANSFORMER, 40VA 208V/240V-PRI 24V-SEC INHERENTLY LIMITED	<1	Rigid Curb Mount	UUT-02
HCT-09VE0BB26271		TRANSFORMER, 40VA 460V-PRI 24V-SEC INHERENTLY LIMITED	<1	N/A	Interpolated
4000-78E07AE15		TRANSFORMER, 40VA 575V-PRI 24V-SEC INHERENTLY LIMITED	<1	N/A	Interpolated
HCT-09UE5BB07271		TRANSFORMER, 100 VA 208/240V-PRI 24V-SEC	<1	Rigid Curb Mount	UUT-01,-02
HCT-10UE5BB07271		TRANSFORMER, 100 VA 460V-PRI 24V-SEC	<1	N/A	Interpolated
HCT-78UE5BB07271		TRANSFORMER, 100 VA 575V-PRI 24V-SEC	<1	Isolated Curb Mount	UUT-03,-04
2S51F	SCHNEIDER ELECTRIC	TRANSFORMER,2000VA 600 PRI-120/240 SEC	50	Isolated Curb Mount	UUT-03
2S1F		TRANSFORMER,2000VA 240/480 PRI-120/240 SEC	50	Rigid Curb Mount	UUT-01

Table 17- Special Seismic Certification
Certified Subcomponent Matrix
Fuses

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Fuses					
Model Number	**Manufacturer**	**Description**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
FRS-R-30	BUSSMANN	FUSE, DUAL ELEMENT TIME DELAY, 600V, 30A, CLASS RK5	<1	Isolated Curb Mount	UUT-03,-04
FRS-R-20		FUSE, DUAL ELEMENT TIME DELAY, 600V, 20A, CLASS RK5	<1	Rigid Curb Mount	UUT-01,-02
FRS-R-25		FUSE, DUAL ELEMENT TIME DELAY, 600V, 25A, CLASS RK5	<1	Isolated Curb Mount	UUT-03,-04
FRN-R-60		FUSE, DUAL ELEMENT TIME DELAY, 600V, 60A, CLASS RK5	<1	Isolated Curb Mount	UUT-03
FRN-R-35		FUSE, DUAL ELEMENT TIME DELAY, 600V, 35A, CLASS RK5	<1	N/A	Interpolated
FRN-R-50		FUSE, DUAL ELEMENT TIME DELAY, 250V, 50A, CLASS RK5	<1	N/A	Interpolated
FRN-R-40		FUSE, DUAL ELEMENT TIME DELAY, 250V, 40A, CLASS RK5	<1	N/A	Interpolated
LP-CC-15		FUSE, TIME DELAY, 600V, 15A, CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
LP-CC-30		FUSE, TIME DELAY, 600V, 30A, CLASS CC	<1	Isolated Curb Mount	UUT-03
LP-CC-4		FUSE, TIME DELAY, 600V, 4A, CLASS CC	<1	Rigid Curb Mount	UUT-01,-02
LP-CC-8		FUSE, TIME DELAY, 600V, 8A, CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
LP-CC-6		FUSE, TIME DELAY, 600V, 6A, CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
LP-CC-5		FUSE, TIME DELAY, 600V, 5A, CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
LP-CC-12		FUSE, TIME DELAY, 600V, 12A, CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
LP-CC-20		FUSE, TIME DELAY, 600V, 20A,CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
LP-CC-25		FUSE, TIME DELAY, 600V, 25A, CLASS CC	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03
LPJ-35SP		FUSE, DUAL ELEMENT TIME DELAY, 600V, 35A, CLASS J	<1	N/A	Interpolated
LPJ-45SP		FUSE, DUAL ELEMENT TIME DELAY, 600V, 45A, CLASS J	<1	N/A	Interpolated
FRS-R-70		FUSE, DUAL ELEMENT TIME DELAY, 600V, 70A, CLASS RK5	<1	Rigid Curb Mount	UUT-01,-02
FRS-R-80		FUSE, DUAL ELEMENT TIME DELAY ,600V, 80A, CLASS J	<1	N/A	Interpolated
FRS-R-100		FUSE, DUAL ELEMENT TIME DELAY, 600V, 100A, CLASS RK5	<1	Isolated Curb Mount	UUT-03,-04
JJN-125		FUSE, FAST ACTING, 300V,125A,CLASS T	<1	Rigid Curb Mount	UUT-01,-02
JJN-150		FUSE, FAST ACTING, 300V,150A,CLASS T	<1	N/A	Interpolated
JJN-175		FUSE, FAST ACTING, 300V, 175A, CLASS T	<1	N/A	Interpolated
JJN-200		FUSE, FAST ACTING, 300V,200A,CLASS T	<1	Isolated Curb Mount	UUT-03,-04

Table 18- Special Seismic Certification
Certified Subcomponent Matrix
Controllers

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Controllers					
Model Number	**Manufacturer**	**Description**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
JD4P120B	SYSTEM SENSOR	CONTROLLER, SMOKE DETECTOR, 21FT HARNESS	<1	Rigid and Isolated Curb Mount	UUT-01,-03
IB-G	SPORLAN	INPUT-OUTPUT BOARD L=76.20MM W=76MM	<1	Isolated Curb Mount	UUT-03,-04
SE-SPU1002-7	JOHNSON CONTROLS	CIRCUIT BOARD SSE, 2 STAGE, NO COMM	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
SE-SPU1012-7		CIRCUIT BOARD SSE, 2 STAGE, W/COMM	<1	N/A	Interpolated
SE-SPU1004-7		CIRCUIT BOARD SSE, 4 STAGE ADD ON	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04

Table 19- Special Seismic Certification
Certified Subcomponent Matrix
Miscellaneous

DCL Project No. 37697-2101

Product Line: Choice (Midas) Standard Efficiency Down Flow

Test Levels: Sds = 1.95g, z/h = 1.0

Miscellaneous						
Model Number	**Manufacturer**	**Description**	**Material**	**Weight (lb)**	**Tested Unit Mounting**	**Unit**
1113-11-3/16-4-30	SPORLAN	DISTRIBUTOR W/11 3/16" TUBES, 4 ORIFICE	Copper & Brass	<1	Rigid Curb Mount	UUT-01,-02
1135-14-3/16-4-30		DISTRIBUTOR W/14 3/16" TUBES, 4 ORIFICE	Copper & Brass	<1	NA	Interpolated
1135-14-3/16-6-30		DISTRIBUTOR W/14 3/16" TUBES, 6 ORIFICE	Copper & Brass	<1	NA	Interpolated
1136-14-1/4-6-30		DISTRIBUTOR W/14 1/4" TUBES, 6 ORIFICE	Copper & Brass	<1	NA	Interpolated
1135-17-3/16-8-38		DISTRIBUTOR W/17 3/16" TUBES, 8 ORIFICE	Copper & Brass	<1	Isolated Curb Mount	UUT-03
1135-17-3/16-10-38		DISTRIBUTOR W/17 3/16" TUBES, 10 ORIFICE	Copper & Brass	<1	Isolated Curb Mount	UUT-04
P32AF-2D	JOHNSON CONTROLS	PRESSURE SWITCH DIFFERENTIAL AIR 0.2 IWC SPDT	Plastic	<1	Rigid and Isolated Curb Mount	UUT-01,-03
2651-005WD-AB-T1-C	SETRA	SENSOR, PRESSURE OUTPUT 0-5VDC	Plastic	<1	Rigid and Isolated Curb Mount	UUT-01,-03
PS80-04-F0372	SENSATA TECHNOLOGIES	SWITCH, LOW PRESSURE 50 PSIG OPEN, 71 PSIG CLOSE	Plastic	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
97647	RECTORSEAL	CONDENSATE OVERFLOW SWITCH 24V	Plastic	<1	Rigid and Isolated Curb Mount	UUT-01,-03
D4SB	SYSTEM SENSOR	Smoke Detector Sensor	Plastic	<1	Rigid and Isolated Curb Mount	UUT-01,-03
142-840018-021	BACKER EHP	CRANKCASE HEATER 70W 240V-1-60	Aluminium	<1	Isolated Curb Mount	UUT-03
142-840018-022		CRANKCASE HEATER 70W 480V-1-60	Aluminium	<1	NA	Interpolated
142-840018-023		CRANKCASE HEATER 70W 600V-1-60	Aluminium	<1	Isolated Curb Mount	UUT-04
1423582	MARATHON	TERMINAL BLOCK, 3P, 600V, 175A	Plastic	<1	NA	Extrapolated
1433572		TERMINAL BLOCK, 3P, 600V, 335A	Plastic	<1	Isolated Curb Mount	UUT-04
362730		TERMINAL BLOCK, 6 PIN 22-12AWG, 300V, 20A	Plastic	<1	NA	Interpolated
1403401		TERMINAL BLOCK, 3P, 600V, 175A	Plastic	12	Rigid Curb Mount	UUT-02
60T15	THERM-O-DISC	LIMIT, TEMPERATURE, 200F OPEN, MAN RESET	Aluminium	<1	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
JJL36250	SQUARE D	CIRCUIT BREAKER 250.0A 600V 3POLE	Plastic, copper	5	Isolated Curb Mount	UUT-03
S29338	SCHNEIDER ELECTRIC	HANDLE ROTARY	Plastic	4	Rigid and Isolated Curb Mount	UUT-01,-02,-03,-04
HGL36000S15	SCHNEIDER ELECTRIC	CIRCUIT BREAKER 150.0A 600V 3POLE	Plastic, copper	4	Rigid and Isolated Curb Mount	UUT-01,-03
JGL36000S25		CIRCUIT BREAKER 250.0A 600V 3POLE	Plastic, copper	5	NA	Interpolated
HJL36150		CIRCUIT BREAKER 150.0A 600V 3POLE	Plastic, copper	4	Rigid and Isolated Curb Mount	UUT-02,-04

Table 20- Special Seismic Certification
Tested Units

DCL Project No. 37967-2101

Manufacturer: York (Johnson Controls)

Product Line: Choice (Midas) Standard Efficiency Down Flow

Tested Product Construction: Powder Coated Carbon Steel Cabinet

Test Levels: Sds = 1.95g, z/h = 1.0

Model Number	Product Line	Dimensions (inches)			Operating Weight (lb)	Nominal Cooling Capacity (Tons)	Tested Unit Mounting	Unit
		Depth	Width	Height				
AD15E1BV2D1A3T37H1	Choice	130	89	52	2040	15.0	Rigid Curb Mount	UUT-01
AD15T3BHBN4LKL41A1		131	89	51	2170	15.0	Rigid Curb Mount	UUT-02
AD25E3BS5T1K3T47H1		144	89	58	2900	25.0	Isolated Curb Mount	UUT-03
AD28N3DHEA4AAL31A1		160	89	60	2570	27.5	Isolated Curb Mount	UUT-04

UUT-01
UNIT UNDER TEST (UUT)
Summary Sheet

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 37697-2101

Manufacturer: York (Johnson Controls)

Product Line: Choice (Midas) Standard Efficiency Down Flow

Model Number: AD15E1BV2D1A3T37H1

Product Construction Summary:
Painted Carbon Steel

Options / Component Summary:
Refridgerant Compressor, Blower Motors, Outdoor Motors, Condenser Coils, Evaporator Coils, Electric Heater, Variable Frequency Drive, Economizer, Filters, Transformers, Fuses, Distributor, Pressure Switchs, Pressure Sensor, Condensate Overflow, Smoke Detector Sensor, Temperature Limit, Rotary Handle

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.

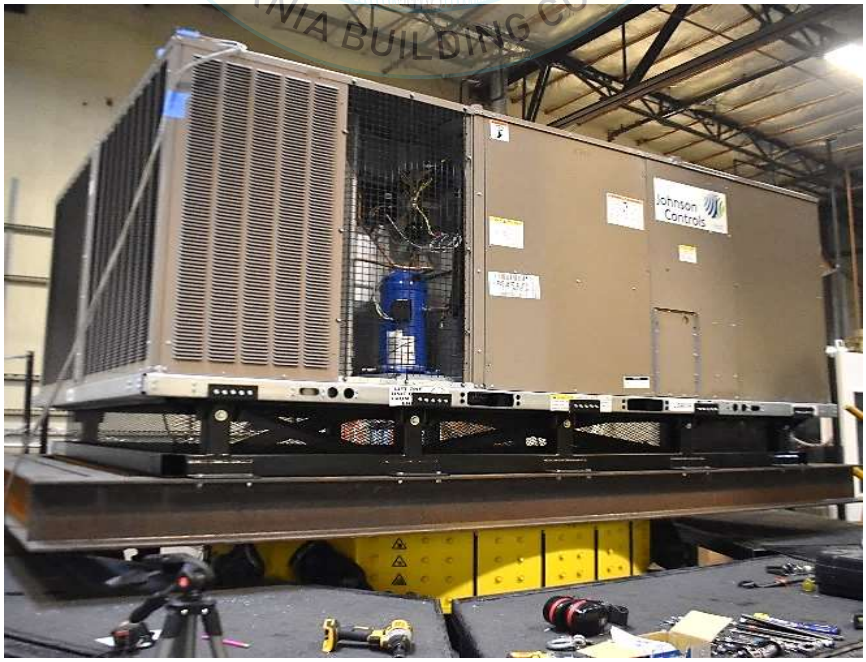
UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,040	130	89	52	15.0	8.0	17.0

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	1.95	1.0	1.5	3.12	2.34	1.30	0.52

Unit Mounting Description: UUT-01 was mounted to a P-6000S non-isolated roof curb supplied by VMC Group using the provided curb (10) z-clips per curb and (50) Tek screws. There were (5) z-clips per long side of the unit and (5) Tek screws per z-clip. The z-clips were connected to the VMC curb using (10) ½" A307 bolts. The VMC curbs were mounted to the test frame using (20) ½" grade 5 bolts.



Overall view of UUT-01

UUT-02
UNIT UNDER TEST (UUT)
Summary Sheet

DCL Project Number: 37697-2101

Manufacturer: York (Johnson Controls)

Product Line: Choice (Midas) Standard Efficiency Down Flow

Model Number: AD15T3BHBN4LKL41A1

Product Construction Summary:

Painted Carbon Steel

Options / Component Summary:

Refridgerant Compressor, Blower Motors, Outdoor Motors, Condenser Coils, Evaporator Coils, Hot Gas Reheat Coils, Service Valves, Variable Frequency Drive, Economizer, Gas Heater, Filters, Transformers, Fuses, Controllers, Distributor, Pressure Switchs, Terminal Block, Temperature Limit, Circut Breaker, Rotary Handle

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.

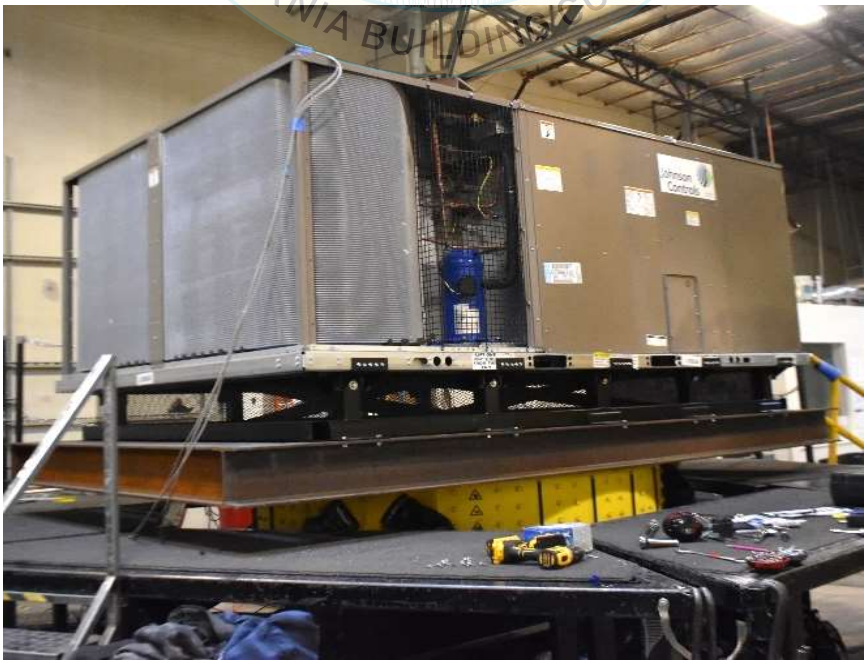
UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,170	131	89	51	14.5	11.0	14.7

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	1.95	1.0	1.5	3.12	2.34	1.30	0.52

Unit Mounting Description: UUT-02 was mounted to a P-6000S non-isolated roof curb supplied by VMC Group using the provided curb (10) z-clips and (50) Tek screws. There were (5) z-clips per long side of the unit and (5) Tek screws per z-clip. The z-clips were connected to the VMC curb using (10) ½" A307 bolts. The VMC curbs were mounted to the test frame using (20) ½" grade 5 bolts.



Overall view of UUT-02

UUT-03
UNIT UNDER TEST (UUT)
Summary Sheet

DCL Project Number: 37967-2101

Manufacturer: York (Johnson Controls)

Product Line: Choice (Midas) Standard Efficiency Down Flow

Model Number: AD25E3BS5T1K3T47H1

Product Construction Summary:
Painted Carbon Steel

Options / Component Summary:
Refridgerant Compressor, Blower Motors, Outdoor Motors, Condenser Coils, Evaporator Coils, Variable Frequency Drive, Economizer, Filters, Transformers, Fuses, Controllers, Distributor, Pressure Switchs, Pressure Sensor, Condensate Overflow, Smoke Detector Sensor, Crankcase Heater, Temperature Limit, Circut Breaker, Rotary Handle

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.

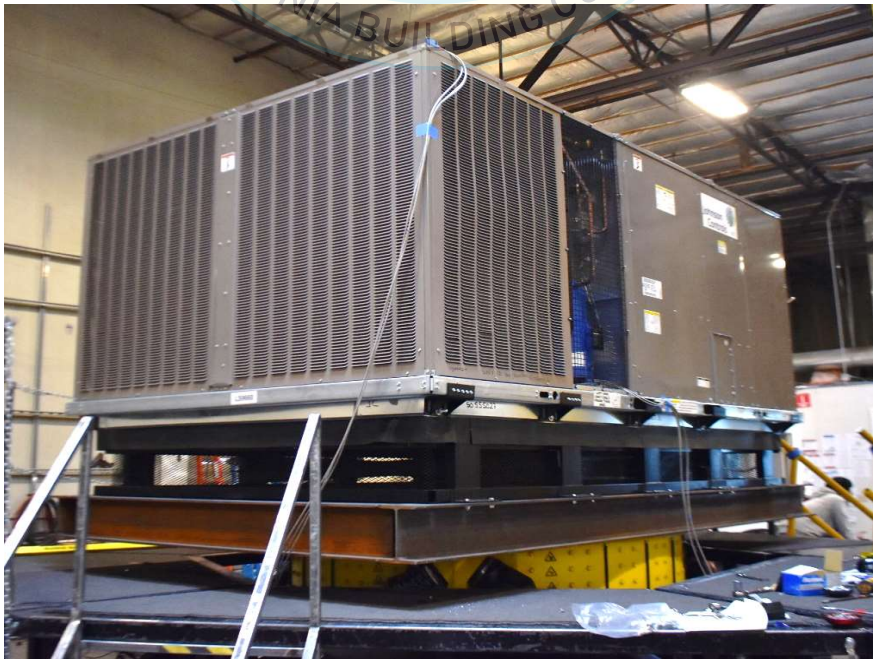
UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,900	144	89	58	4.4	4.0	11.2

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	1.95	1.0	1.5	3.12	2.34	1.30	0.52

Unit Mounting Description: UUT-03 was mounted to a P-6200 isolated roof curb supplied by VMC Group using the provide curb (9) z-clips and (29) Tek screws. There were (4) z-clips on the left long side of the unit and (5) z-clips on the right long side of the unit. There were and (5) Tek screws per z-clip in each of the four corners of the unit, (4) Tek screws in the fourth row of z-clips on both sides and (1) Tek screw in center z-clip on the right side. The z-clips were connected to the VMC curb using (9) ½" A307 bolts. The VMC curbs were mounted to the test frame using (20) ½" grade 5 bolts.



Overall view of UUT-03

UUT-04
UNIT UNDER TEST (UUT)
Summary Sheet

DCL DYNAMIC CERTIFICATION LABORATORIES,LLC

DCL Project Number: 37697-2101

Manufacturer: York (Johnson Controls)

Product Line: Choice (Midas) Standard Efficiency Down Flow

Model Number: AD28N3DHEA4AAL31A1

Product Construction Summary:

Painted Carbon Steel

Options / Component Summary:

Refridgerant Compressor, Blower Motors, Outdoor Motors, Condenser Coils, Evaporator Coils, Filters Transformers, Fuses, Controllers, Distributor, Pressure Switchs, Crankcase Heater, Terminal Block, Temperature Limit, Circut Breaker, Rotary Handle

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.

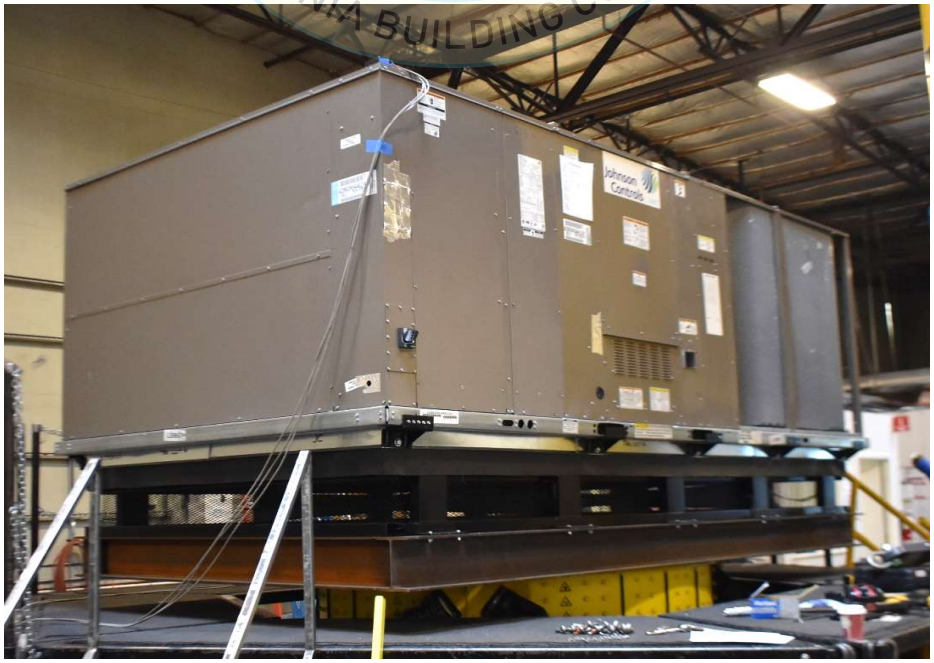
UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,570	160	89	60	3.4	3.5	6.5

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	1.95	1.0	1.5	3.12	2.34	1.30	0.52

Unit Mounting Description: UUT-04 was mounted to a P-6200 isolated roof curb supplied by VMC Group using the provide curb (10) z-clips and (29) Tek screws. There were (5) z-clips per long side of the unit and (5) Tek screws per z-clip. There were and (5) Tek screws per z-clip in each of the four corners of the unit, (3) Tek screws in the second row of z-clips on both sides, (2) Tek screw in center z-clip on the right side and (1) Tek screw in center z-clip on the left side. The z-clips were connected to the VMC curb using (10) ½" A307 bolts. The VMC curbs were mounted to the test frame using (20) ½" grade 5 bolts



Overall view of UUT-04