

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0122
HCAI Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: Loren Cook Company	
Manufacturer's Technical Representative: Bradley Skidmore	
Mailing Address: 2015 East Dale St., Springfield, MO 65808	
Telephone: (417) 869-6474 Email: bskidmore@lore	ncook.com
Product Information	Up.
Product Name: Air Handling Units	1 Starten Star
Product Type: Fans OSP-0122	
Product Model Number: 90ASP, 100ASP, 120ASP, 150ASP 180ASP, 200A	ASP T
General Description: Supply fans with carbon steel housings and forward	d curved carbon steel wheels.
Mounting Description: Rigid, Rigid mounted on 9-1/2" tall Aluminum or Ca	arbon Ste <mark>el cu</mark> rb or 24" tall Carbon Steel curb.
Tested Seismic Enhancements: None DATE: 05/27/2022	6/1
	2
Applicant Information	4.
Applicant Company Name: VMC Group	01
Contact Person: John Giuliano	
Mailing Address: Main Street, Bloomingdale, NJ 07403	
Telephone: (973) 838-1780 Email: john.giuliano@th	nevmcgroup.com
Title: President	

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





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California Licensed Structural Engineer	Respons	ible for the Engine	eering and Test Repo	rt(s)			
Company Name: THE VMC GROUP							
Name: Kenneth Tarlow		California Licer	California License Number: S2851				
Mailing Address: 980 9th Street, 16th Floor, Sa	acramento,	CA 95814					
Telephone: (832) 627-2214	Email:	ken.tarlow@thevmo	cgroup.com				
Certification Method							
GR-63-Core X ICC-ES AC15	56	IEEE 344	IEEE 693	NEBS 3			
Other (Please Specify):							
	FOR	CODECO					
Testing Laboratory	PF	·····	Ó,				
Company Name: ELEMENT MATERIALS TEC	HNOLOGY		4				
Contact Person: Kent L. Erickson			2				
Mailing Address: 9725 Girard Ave South, Minn	eapolis MN	N 55431	m				
Telephone: (952) 888-7795	SV Email:	kle@environlab.cor	m				
	DATE:	05/27/2022	9				
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Seismic Parameters

Design Basis of Equipment or Components	s (Fp/Wp) =1.71						
SDS (Design spectral response accel	eration at short period, g) = 2.27						
ap (Amplification factor) =	2.5						
Rp (Response modification factor) =	6.0						
Ω_0 (System overstrength factor) =	r) = 2.0						
lp (Importance factor) =	1.5						
z/h (Height ratio factor) =	1						
Natural frequencies (Hz) =	See Attachment						
Overall dimensions and weight =	See Attachment						
	ED FORMA						
		4					
HCAI Approval (For Office Use Only)	Approval Expires on 05/27/2028	1					
Date: 5/27/2022	OSP-0122	ICH					
Name: Mohammad Karim		Title:	Supervisor, Health Facilities				
Special Seismic Certification Valid Up to: S	DS(g) = 2.27	z/h =	1				
Condition of Approval (if applicable):	DATE: 05/27/2022	0					
	PRVIA BUILDING COD	\$ 201					

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Model Line	Model	Overa	II Dimensio	ns [in]	Material	Mounting Description	Weight [UUT	
	Number	Depth	Width	Height	Wateria	Mounting Description	lb]	001	
	90 ASP	33	33	26.5		Rigid Base Mounted to 9-1/2" tall Aluminum Curb	263	UUT-1	
	90 ASP	33	33	26.5			263	Interpolated	
	100 ASP	38.5	38.5	30			335	Interpolated	
ASP	120 ASP	42.5	42.5	33	16 Gauge Galvanized	Rigid Base Mounted on Carbon	385	Interpolated	
[Belt Drive]	150 ASP	46	46	36	Carbon Steel	Steel Curb up to 24" Tall	435	Interpolated	
	180 ASP	56	56	40 R	CODE		630	Interpolated	
	200 ASP	68	68	47			925	Interpolated	
	200 ASP	68	68	47	CA:	Rigid Base Mounted to 24" tall Carbon Steel Curb	925	UUT-2	

Table 1 - Certified Supply Fans



Model Number	Rating [hp]	Frame	Manufacturer	Weight [Ib]	UUT
EM3116T	1	145 T		34	UUT-1
EM3154T	1.5	1401		37	Interpolated
EM3157T	2	184 T	Baldor	40	Interpolated
EM3218T	5	104 1		84	Interpolated
EM3311T	7.5	213 T		115	UUT-2

Table 2 - Certified Fan Motors

Table 3 - Certified Motorized Damper

Model Number	Material	Manufacturer	Weight [Ib]	UUT
BDMI-18	Aluminum		18	UUT-1
BDMI-22	Aluminum		22	Interpolated
BDMI-26	Aluminum	Ruskin	25	Interpolated
BDMI-30	Aluminum	6	35	Interpolated
BDMI-42	Aluminum	FORC	UDE73	UUT-2

Table 4 - Certified Filters

Model Number	Dimensions [in]			Manufacturer	Weight [Ib]	UUT	
	Depth	Width	Height	Wallulacturer		001	
9 ASP	1 4	10.25	P_0119.75	C	0.75	UUT-1	
10 ASP	1 4	12	24	m	1	Interpolated	
12 ASP	1	16	28	Loren Cook	1.75	Interpolated	
15 ASP	1 0	BY 16/Iohan	hmad 28 arim	LOTEIT COOK	1.75	Interpolated	
18 ASP	1	20	32		2.5	Interpolated	
20 ASP	1	27.75	44		4.5	UUT-2	





UNIT UNDER TEST (UUT)

UUT-1

Summary Sheet

t Report: 12520

							Test Rep	oft: 42529-1
Model Line Model Number						N	lanufacture	ər
ASP			90 ASP			Lore	n Cook Com	ipany
		Product Co	onstruction	Summary				
Galvanized Carbon Stee	el Enclosure on 9-1/2" Al	uminum Cur	b					
		Options / Su	bcompone	nt Summar	у			
Fan Motor, Motorized Da	amper, Filters							
		FOR	CODE	CON				
	4		JT Properti	es	5.			
Weight		Dimensio	ons [in]			Lowes	st Nat. Freq	. [Hz]
[lbs]	Length	Wic	lth	Hei	ight	F-B	S-S	V
263	33.0	33	9P-012	2 26	6.5	24.0	16.1	16.6
	UUT P	lighest Pass	ed Seismic	c Run Inform	nation			
Building Code	Test <mark>Criter</mark> ia	SVS _{ps/ob}	am ^{z/h} ad	Karm	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2019	ICC-ES AC156	2.27	1.0	1.5	3.63	2.72	1.52	0.61
000 2013		ATE.	05/27/3	022	-	-	-	-
			Mounting D		12			
The unit was attached to	o the curb using (12) 12-	14x2" Grade	5 self-drillir	ng sheet met	tal screws th	rough the fa	n housing in	nto the curb.
The curb was attached t	to the shake table using	(12) 5/16" dia	ameter Grad	de 5 fastene	rs.			
	(p			AND	×/			
		VIA		- 0				
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	and Providence							A TONY
0	Vertical axis				Horizo	ontal axis		



UNIT UNDER TEST (UUT)

UUT-2

Summary Sheet

+ D ort. 12520

							Test Rep	ort: 42529-1	
Model Line		M	odel Numb	er		r	Manufacturer		
ASP			200 ASP			Lore	n Cook Com	ıpany	
		Product C	onstructior	n Summary		-			
Galvanized Carbon Stee	el Enclosure on 24" Carl	bon Steel Cu	rb						
		Options / Su	lbcompone	ent Summar	У				
Fan Motor, Motorized D	amper, Filters								
		FOR	CODE	CON					
		U	UT Properti	es					
Weight	L.	Dimensio			5	Lowest Nat. Freq		. [Hz]	
[lbs]	Length	Wie			ight	F-B	S-S	v	
925	68.0		9P-012	2 47.0		10.4	8.1	29.2	
	KAVXAXXA	Highest Pass					-		
Building Code	Test Criteria	BY S psloh	am z/h ad	Karlm	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}	
CBC 2019	ICC-E <mark>S AC1</mark> 56	2.27	1.0	1.5	3.63	2.72	1.52	0.61	
		DATE	05/27/ Mounting D			-	-	-	
The unit was attached to	o the curb using(12) 12-		A DURING NOTION	A REAL PROPERTY AND	al screws the	rough the far		to the curb	
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All units were filled with contents and maintained structural integrity and functionality after AC-156 test.