MULTI-ROOM DUCTLESS HEAT-PUMP SYSTEMS

42,000 BTU / H WALL MOUNTED HEAT- PUMP SYSTEM

SUBMITTAL DATA: TM42HX4O

Job Name	Location	Date		
Purchaser	Engineer			
Submitted To	For	☐ Reference	☐ Approval	☐ Construction
Unit Designation	Schedule No.			

AHRI CERTIFIED REF	
NON-DUCTED	211164243
DUCTED	211164248
MIX	211174360

Energy Star Unique ID	
NON-DUCTED	2409840
DUCTED	4515314
MIX	4517776

Operating Range	
Cooling	-22 ~ 118°F
	-30 ~ 48°C
Heating	-22 ~ 75°F
	-30 ~ 24°C



SYSTEM RATINGS	
Non-Ducted Indoor Units	
Rated Cooling Capacity(95°F)	36,000 BTUH
Cooling Capacity (min-max)	8,870~40,940 BTUH
SEER2 / EER2	21.0 / 12.0
Rated Heating Capacity(47°F)	40,000 BTUH
Heating Capacity (min-max)	8,870~43,200 BTUH
Low temperature heating(17°F / 5°F)	35,600 / 32,400 BTUH
COP @ 47°F / 5°F	3.88 / 1.92
HSPF 2(Region IV/V)	10.0 / 8.0
Ducted Indoor Units	
Rated Cooling Capacity(95°F)	36,000 BTUH
Cooling Capacity (min-max)	8,870~40,940 BTUH
SEER2 / EER2	16.0 / 11.0
Rated Heating Capacity(47°F)	40,000 BTUH
Heating Capacity (min-max)	8,870~43,200 BTUH
Low temperature heating(17°F/5°F)	32,400 / 32,400 BTUH
COP @ 47°F / 5°F	3.44 / 1.84
HSPF 2(Region IV/V)	8.1 / 7.0
Mixed Ducted and Non-Ducted Indoor Units	
Rated Cooling Capacity(95°F)	36,000 BTUH
Cooling Capacity (min-max)	8,870~40,940 BTUH
SEER2 / EER2	18.5 / 11.5
Rated Heating Capacity(47°F)	40,000 BTUH
Heating Capacity (min-max)	8,870~43,200 BTUH
Low temperature heating(17°F/5°F)	34,000 / 32,400 BTUH
COP @ 47°F / 5°F	3.60 / 1.80
HSPF 2(Region IV/V)	9.0 / 7.4

OUTDOOR UNIT DATA	
Compressor	
Type	Twin Rotary
RLA	18.4 A
Compressor Crankcase and Base Pan Heaters included	
Fan Motor	
Output Power	130 W
FLA	2.8 A
Air Flow (Max)	3,413 CFM
Sound Pressure Level	
Cooling / Heating	54 / 54 dB(A)
Dimensions & Weights	
Unit Dimensions (W x D x H)	40-3/16 x 32-1/2 x 16-13/16 in
Weight (Net/Gross)	175 / 190 LBS
Allowable Indoor Units Quantity	1 ~ 5
REFRIGERANT PIPING DATA	
Refrigerant	R410a / 134 oz
Additional Charge Per Line Length	0.20 oz/ft
Connection Method	Flared
Pre-charge Piping Length	164 ft
Max Total Piping Length	328 ft
Max Height Distance (IDU to IDU)	82 ft
Max Length to any IDU	82 ft
Max Height Distance (IDU to ODU)	82 ft

Power Supply			
Range	208/230 V, 1 Phase, 60 Hz	Interconnecting Cable Wire Size	14-4 AWG
		Rated Current (Cooling/Heating)	20.4 / 21.7 A
Voltage Range	187 - 253 V	MCA / MOCP	29.0 / 45.0 A
Main Power Wire Size	14-2 AWG	Suggested Breaker Size	40.0 A

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FEATURES & FUNCTION SUMMARY: TM42HX4O

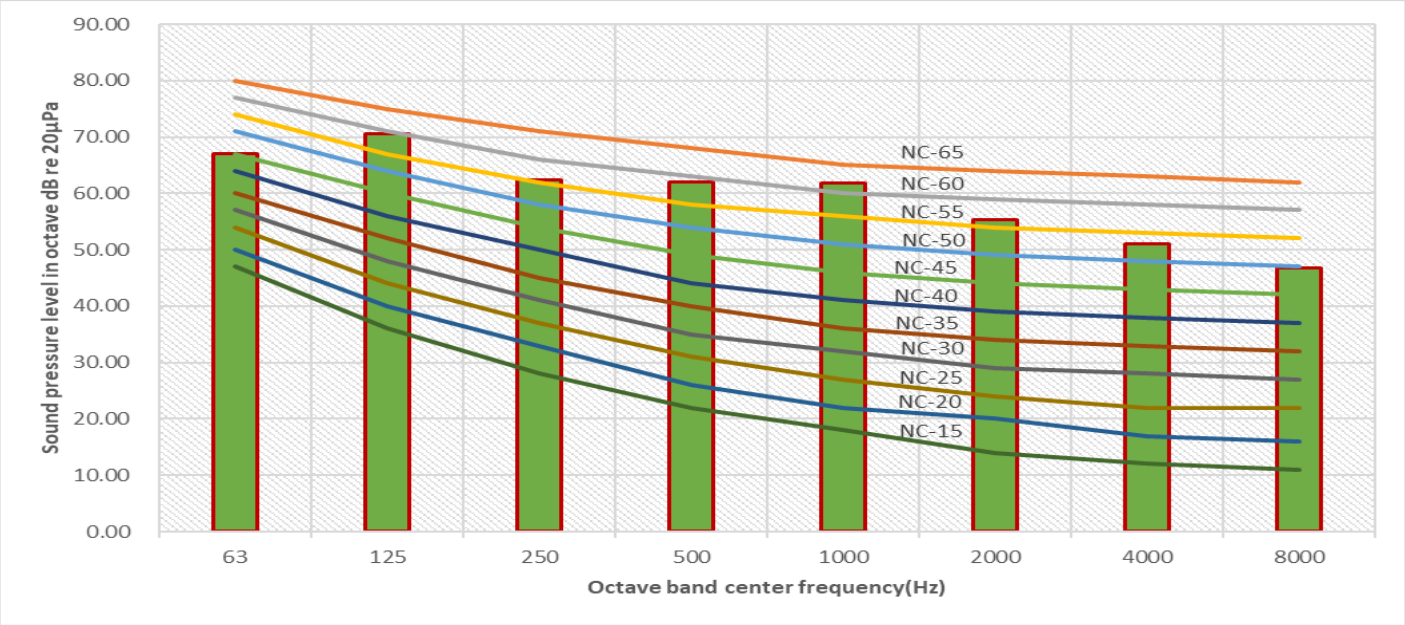
SYSTEM FEATURES	
Inverter Type	DC Inverter
Ultra Low Frequency Torque Control	YES
Power Factor Correction	YES
Compressor Type	Twin Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	YES
Compressor With Electric Heater	YES
Condenser Fan	Axial
Condenser Motor Type	DC
Condenser Motor Drive	Direct
Condenser Coil	Aluminum Fin/Copper Tube
Outdoor Fin Coating (Blue)	Acrylic Resin
Intelligent Defrosting	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Low Ambient Cooling	YES
XE72-44/E Wired Controller Interface	YES
REMOTE CONTROLLER FUNCTIONS	**See individual Indoor Unit Controllers Functions**
XE72-44/E WIRED CONTROLLER FUNCTIONS[2]	
On/Off	YES
Operating Mode	YES
Fan Speed	YES
Room Setpoint	YES
Model Numbers	YES
Timer Mode	YES
Sleep Mode	YES
Turbo Mode	YES
X-Fan Mode	YES
Privacy Lock	YES

Note: Some indoor models may not support specific system features or functions.

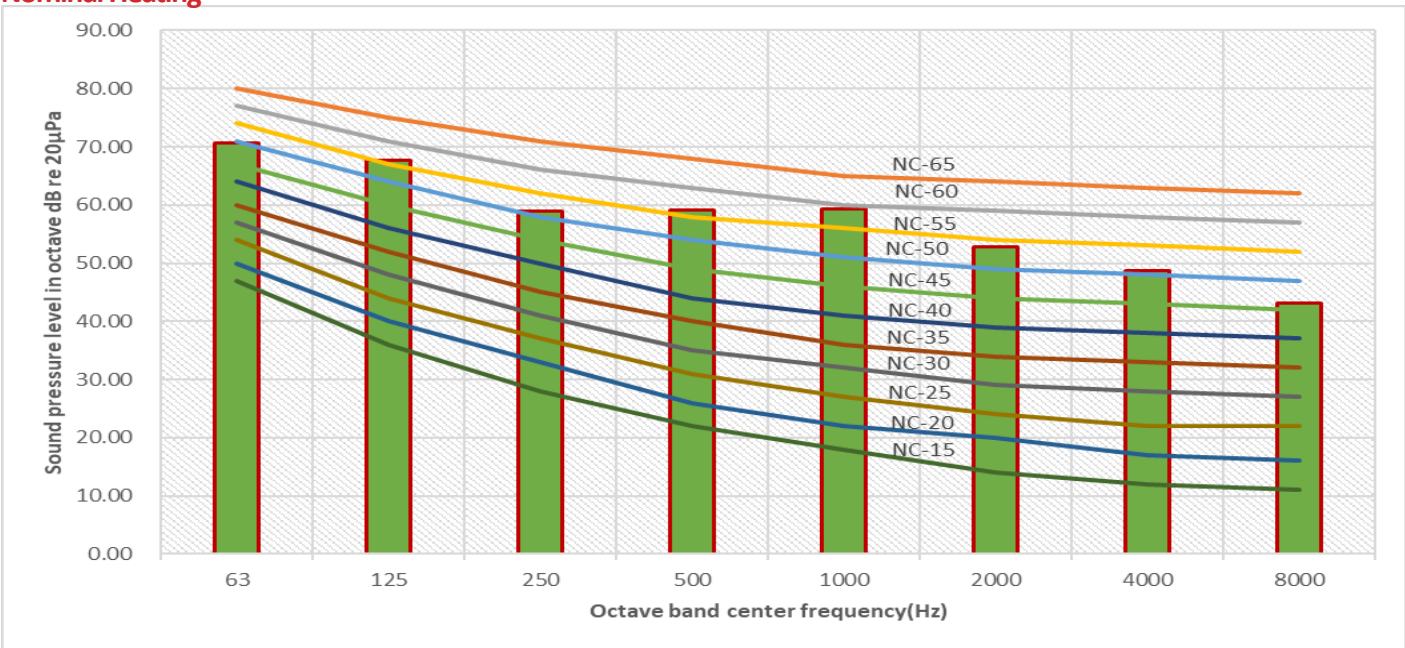
SOUND DATA: TM42HX4O

ACOUSTIC OCTAVE-BAND SOUND POWER DATA

Nominal Cooling



Nominal Heating



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INDOOR UNIT COMBINATION TABLE

IDU quantity	TM18HX4O	TM24HX4O	TM30HX4O	TM36HX4O	TM42HX4O
1	9	/	/	/	/
	12	12	/	/	/
	18	18	18	18	18
	24	24	24	24	24
2	07+07	07+07	/	/	/
	07+09	07+09	07+09	/	/
	07+12	07+12	07+12	/	/
	/	07+18	07+18	07+18	/
	/	07+24	07+24	07+24	07+24
	09+09	09+09	09+09	09+09	09+09
	09+12	09+12	09+12	09+12	09+12
	12+12	09+18	09+18	09+18	09+18
	/	/	09+24	09+24	09+24
	/	12+12	12+12	12+12	12+12
	/	12+18	12+18	12+18	12+18
	/	/	12+24	12+24	12+24
	/	/	/	18+24	18+24
	/	/	/	/	24+24
3	/	07+07+07	07+07+07	07+07+07	07+07+07
	/	07+07+09	07+07+09	07+07+09	07+07+09
	/	07+07+12	07+07+12	07+07+12	07+07+12
	/	/	07+07+18	07+07+18	07+07+18
	/	/	07+07+24	07+07+24	07+07+24
	/	07+09+09	07+09+09	07+09+09	07+09+09
	/	07+09+12	07+09+12	07+09+12	07+09+12
	/	/	07+09+18	07+09+18	07+09+18
	/	/	/	07+09+24	07+09+24
	/	/	/	07+12+24	07+12+24
	/	/	/	/	07+18+24
	/	09+09+09	09+09+09	09+09+09	09+09+09
	/	09+09+12	09+09+12	09+09+12	09+09+12
	/	/	09+09+18	09+09+18	09+09+18
	/	/	/	09+09+24	09+09+24
	/	/	09+12+12	09+12+12	09+12+12
	/	/	09+12+18	09+12+18	09+12+18
	/	/	/	09+12+24	09+12+24
	/	/	/	09+18+18	09+18+18
	/	/	/	/	09+18+24
	/	/	/	12+12+12	12+12+12
	/	/	/	12+12+18	12+12+18
	/	/	/	/	12+18+18
	/	/	/	/	18+18+18

IDU quantity	TM18HX4O	TM24HX4O	TM30HX4O	TM36HX4O	TM42HX4O
4	/	/	07+07+07+07	07+07+07+07	07+07+07+07
	/	/	07+07+07+09	07+07+07+09	07+07+07+09
	/	/	07+07+07+12	07+07+07+12	07+07+07+12
	/	/	07+07+07+18	07+07+07+18	07+07+07+18
	/	/	07+07+07+24	07+07+07+24	07+07+07+24
	/	/	07+07+09+09	07+07+09+09	07+07+09+09
	/	/	07+07+09+12	07+07+09+12	07+07+09+12
	/	/	/	07+07+09+18	07+07+09+18
	/	/	/	/	07+07+09+24
	/	/	/	07+09+12+12	07+09+12+12
	/	/	/	07+09+12+18	07+09+12+18
	/	/	/	07+12+12+12	07+12+12+12
	/	/	/	/	07+12+12+18
	/	/	09+09+09+09	09+09+09+09	09+09+09+09
	/	/	09+09+09+12	09+09+09+12	09+09+09+12
	/	/	/	09+09+12+12	09+09+12+12
	/	/	/	09+12+12+12	09+12+12+12
	/	/	/	/	12+12+12+12
	/	/	/	/	12+12+12+18
5	/	/	/	/	07+07+07+07+07
	/	/	/	/	07+07+07+07+09
	/	/	/	/	07+07+07+07+12
	/	/	/	/	07+07+07+07+18
	/	/	/	/	07+07+07+07+24
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	/	/	/	/	07+07+07+09+12
	/	/	/	/	07+07+07+09+18
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	/	/	/	/	09+09+09+09+09
	/	/	/	/	09+09+09+09+12
	/	/	/	/	09+09+09+09+18
	/	/	/	/	09+09+12+12+12

Note: ($\sum IDUs$Capacity ÷ODU capacity) range: 50%~150%, recommend range 50%~130%. When it exceeds the recommended range, leads to IDU poor performance when most IDUs turn on

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EXTENDED RATINGS: TM42HX4O

HEATING PERFORMANCE

Outdoor Ambient Temperature (DB)		Return Air Temperature								
		70°F (DB) / 59°F (WB)			75°F (DB) / 63°F (WB)			80°F (DB) / 67°F (WB)		
		TC (Btu/h)	COP (W/W)	Power Input (W)	TC (Btu/h)	COP (W/W)	Power Input (W)	TC (Btu/h)	COP (W/W)	Power Input (W)
MAX OUTPUT*	**-22°F**	24,500	1.59	4,520	24,182	1.53	4,619	23,569	1.46	4,723
	-5°F	29,240	1.85	4,628	28,860	1.79	4,730	28,129	1.70	4,836
	0°F	30,820	1.94	4,664	30,419	1.87	4,767	29,649	1.78	4,874
	5°F	32,400	2.02	4,700	31,979	1.95	4,803	31,169	1.86	4,912
	7°F	32,857	2.07	4,654	32,430	2.00	4,757	31,609	1.90	4,864
	17°F	35,600	2.38	4,380	35,137	2.30	4,476	34,247	2.19	4,577
	28°F	37,250	2.82	3,870	36,766	2.72	3,955	35,835	2.60	4,044
	38°F	38,625	3.29	3,445	38,123	3.17	3,521	37,157	3.03	3,600
	47°F	40,000	3.88	3,020	39,480	3.75	3,086	38,480	3.57	3,156
	57°F	41,200	4.18	2,886	40,664	4.04	2,949	39,634	3.85	3,016
	68°F	42,800	4.42	2,839	42,244	4.27	2,902	41,174	4.07	2,967
	77°F	44,000	4.65	2,776	43,428	4.49	2,837	42,328	4.28	2,901

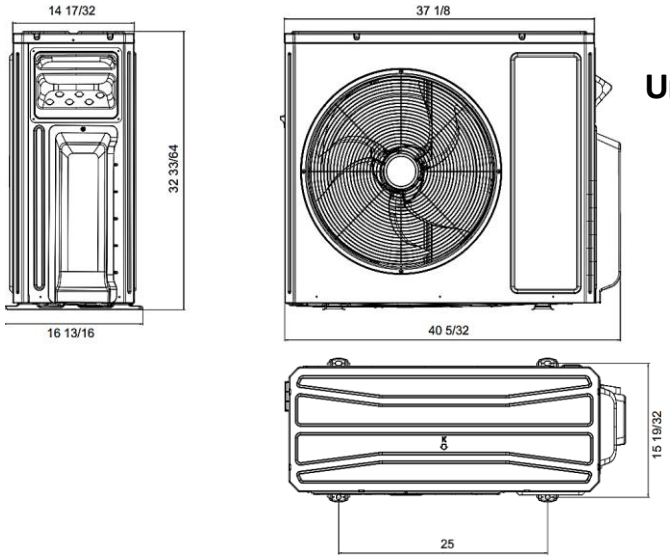
*Maximum Output values are not based on AHRI test conditions

LEGEND:	W - Watts
	DB - Dry Bulb
	TC - Total Capacity
	SC - Sensible Capacity
	SHR - Sensible Heat Ratio
	COP - Coeffecient of Performance

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DIMENSIONAL SPECIFICATIONS: TM42HX4O



Units: inch

Suction/Gas Line Port Size

Port A	3/8-in OD Flared
Port B	3/8-in OD Flared
Port C	3/8-in OD Flared
Port D	3/8-in OD Flared
Port E	3/8-in OD Flared

Liquid Line Port Size

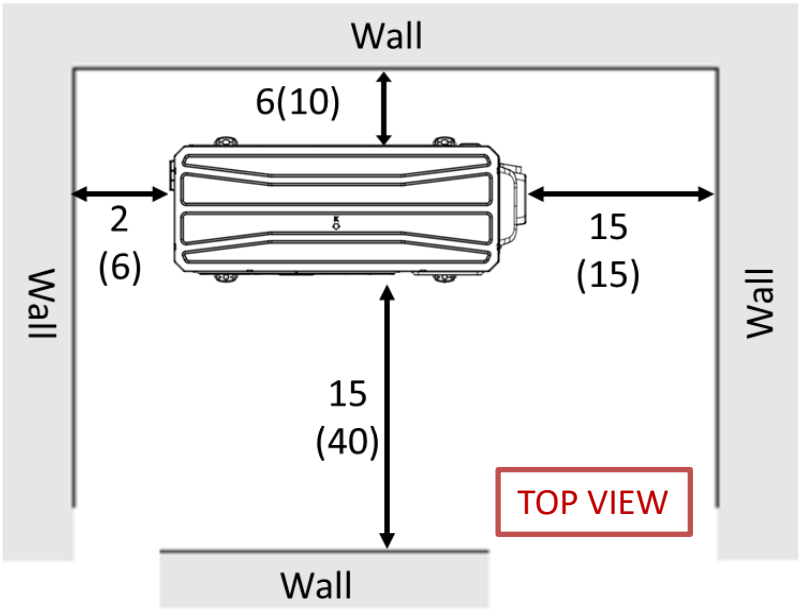
Port A	1/4-in OD Flared
Port B	1/4-in OD Flared
Port C	1/4-in OD Flared
Port D	1/4-in OD Flared
Port E	1/4-in OD Flared

Factory Supplied Piping Adapters

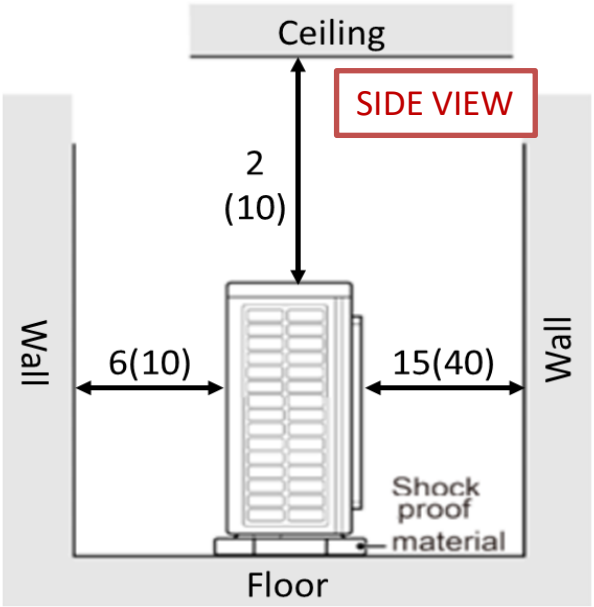
Adapter	P/N	Qty
3/8 (F) to 5/8 (M)	6654100009	2
3/8 (F) to 1/2 (M)	6654100013	4
1/4 (F) to 3/8 (M)	6654104	2

MINIMUM SPACING REQUIREMENTS

Units: inch



The ceiling should be open



Either left or right side should be open

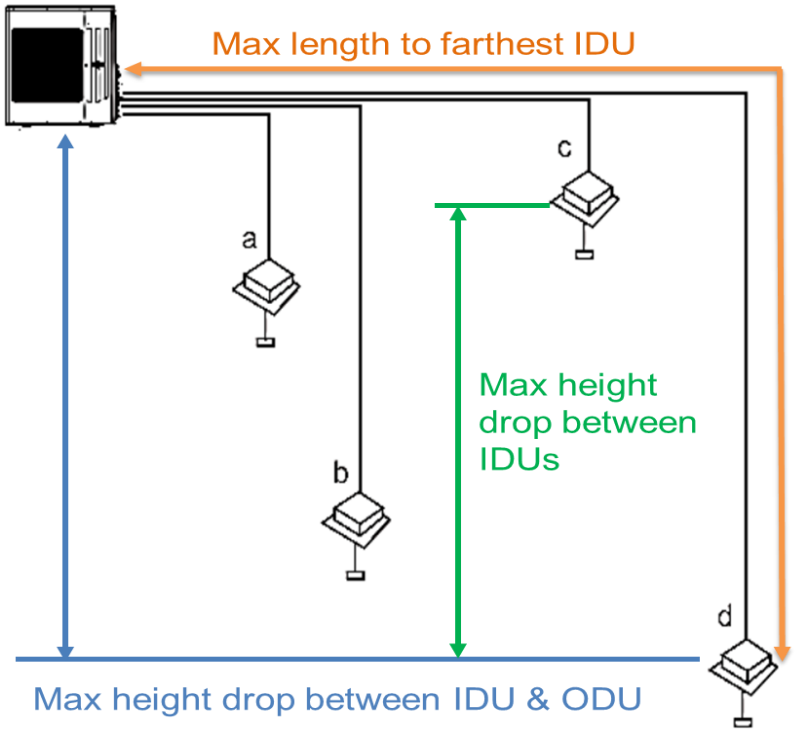
Note:

1. Apply the value in the brackets to achieve best performance
2. Wall height on air outlet side ≤ 50inch

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PIPING REQUIREMENT: TM42HX4O



1. The actual total piping length ≤ the free ref. charge length: No need to charge additional ref.
2. Exceeds the above value to charge 20g/m(0.2oz/feet)
3. Only count for liquid piping length

Unit m *(feet)* / TM**HX4O	18K	24K	30K	36K	42K
Total length	40 *(131)*	60 *(197)*	80 *(263)*	80 *(263)*	100 *(328)*
Length to farthest IDU	20 *(66)*	20 *(66)*	25 *(82)*	25 *(82)*	25 *(82)*
Max height drop between IDU & ODU	15 *(49)*	15 *(49)*	25 *(82)*	25 *(82)*	25 *(82)*
Max height drop between IDUs	15 *(49)*	15 *(49)*	25 *(82)*	25 *(82)*	25 *(82)*
Pre-charged ref. length	10 *(33)*	30 *(98)*	40 *(131)*	40 *(131)*	50 *(164)*

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