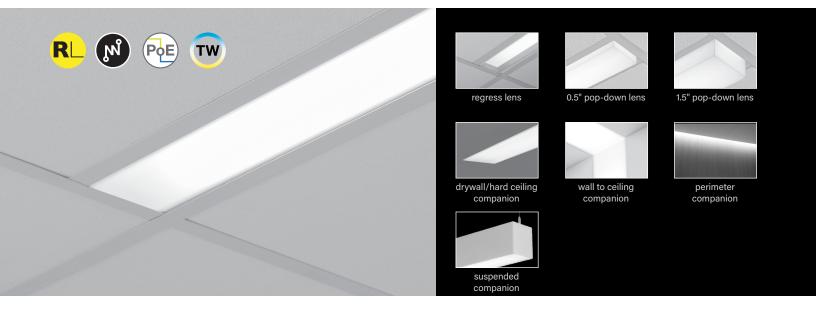
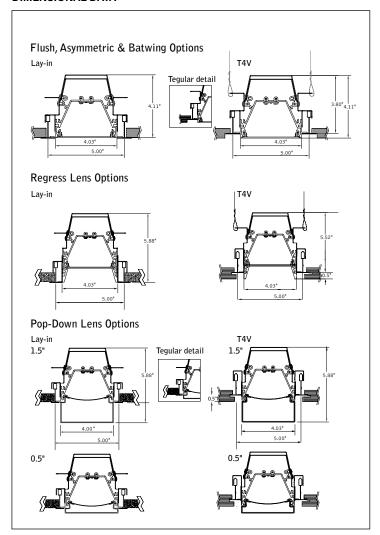
# Seem® 4 Grid Ceiling





# **DIMENSIONAL DATA**



# **FEATURES**

4" aperture recessed slot LED integrates with grid ceilings for a clean, unobtrusive aesthetic.

Individual units and continuous runs in 1" increments.

Available in flush, asymmetric, asymmetric room fill, batwing, regress, 0.5" or 1.5" pop-down lens.

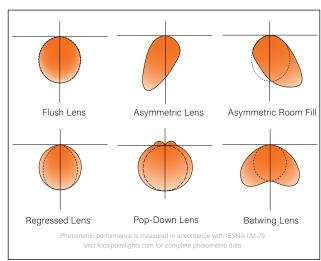
LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

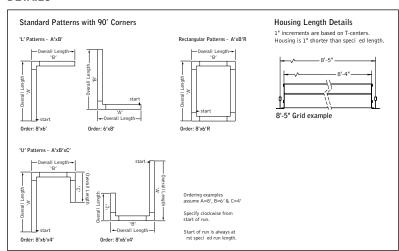
Connected Solutions: Integrates with wired and wireless building lighting control systems.

PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.

# **DISTRIBUTIONS**



# **DETAILS**



# 4' PERFORMANCE CHART

		BW		FL		AS		AF	
		Tested		Tested		Tested		Tested	
Lumen	Nominal	System		System		System		System	
Output	Lumens	Watts	LPW	Watts	LPW	Watts	LPW	Watts	LPW
275LF	1100	8.8	125	9.1	121	8.5	130	8.6	128
375LF	1500	11.3	133	11.7	129	10.8	138	11.0	137
625LF	2500	19.0	131	19.7	127	18.3	137	18.5	135
875LF	3500	27.0	129	27.9	125	25.9	135	26.2	133
1000LF	4000	31.1	129	32.2	124	29.8	134	30.2	132
1125LF	4500	35.4	127	36.6	123	33.9	133	34.4	131
1250LF	5000	39.8	126	41.2	121	38.1	131	38.6	129

Based on 3500K, 80 CRI, 4' lengths, Lumen multiplier: 90+ CRI = 0.87. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

# 4' PERFORMANCE CHART - REGRESS

		SR		SRXP		
					_	
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW	
275LF	1100	9.4	117	8.7	127	
375LF	1500	12.5	120	11.1	135	
625LF	2500	21.1	118	18.7	134	
875LF	3500	30.0	117	26.5	132	
1000LF	4000	34.6	116	30.6	131	
1125LF	4500	39.5	114	34.8	129	
1250LF	5000	44.4	113	39.0	128	

Based on 3500K, 80 CRI, 4' lengths. Lumen multiplier: 90+ CRI = 0.87. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

# 4' PERFORMANCE CHART - POP-DOWN

		0.5"		1.5"	
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	11.0	100	11.9	93
375LF	1500	14.7	102	15.8	95
625LF	2500	25.0	100	27.0	93
750LF	3000	30.3	99	32.7	92
875LF	3500	35.7	98	38.6	91
1000LF	4000	41.3	97	44.7	89

Based on 3500K, 80 CRI, 4' lengths. Lumen multiplier: 90+ CRI = 0.87. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.



STANDARD WHITE		
Luminaire Series		FSM4L
Seem 4 LED	FSM4L	TOWITE
Shielding Asymmetric Lens	AS	
Asymmetric Room Fill	AF	
Batwing Lens Flush Satin Lens	BW FL	
Regress Lens	SR	
Regress High Performance Lens	SRXP	
0.5" Pop-Down Lens (750LF max.)  1.5" Pop-Down Lens (750LF max. individual units only)	PD05 PD15	
Lumen Output		
<ul><li>275 Lumens per foot (Not available with LH1.)</li><li>375 Lumens per foot (Not available with LH1.)</li></ul>	275LF 375LF	
625 Lumens per foot (BW, FL & SR 3' min. individual units only with LH1.	625LF	
SRXP 4' min. individual units only with LH1.)  750 Lumens per foot (Pop-Down Lenses only)	750LF	
875 Lumens per foot (SR & SRXP 3' min. individual units only with LH1.)	875LF	
1000 Lumens per foot	1000LF	
1125 Lumens per foot 1250 Lumens per foot	1125LF 1250LF	
Color Temperature	IZOULI	
2700K, 80+ CRI <b>or</b> 90+ CRI	27K <b>or</b> 927K	
3000K, 80+ CRI <b>or</b> 90+ CRI 3500K, 80+ CRI <b>or</b> 90+ CRI	30K or 930K 35K or 935K	
4000K, 80+ CRI <b>or</b> 90+ CRI	40K or 940K	
Circuits & Zones	10	
1 Circuit, non-emergency Consult Ordering Guide on page 6 for	1C _C_Z_DL	
multiple circuiting and zoning options		
Voltage 120/277 UNV Volt	UNV	
Low Voltage	LV	
Control System & Dimming Level		
0-10V - 10% Dimming 0-10V - 1% Dimming	LD1 L11	
Low Voltage, PoE compatible	LVN	
(No driver. Not available with EM or EC. LV Voltage only.)  Lutron Hi-Lume EcoSystem (LDE1) -	LH1	
1% Dimming (625LF min.)	D11	
DALI 1% Dimming (1000LF max.) Wattstopper DLM - 1% Dimming**	DLM1	
Wattstopper Fixture Sensor Low Density -**	LMFS1	
1% Dimming Wattstopper Fixture Sensor High Density -**	LMFSD	
1% Dimming		
Lutron Athena Wireless Node** Lutron Athena Wireless Sensor**	LAW1 LAWS	
Acuity nLight - 1% Dimming**	NLT1	
Enlighted Smart Sensor - 1% Dimming**	ENL1	
Encelium CLM Connected Lighting Module -** 1% Dimming	CLM1	
Current NX Enabled – 1% Dimming**	NXE1	
WaveLinx Pro – 1% Dimming**  **(3' min. length. 7' min. length with ECD/EM. Not available with  Pop-Down Lenses.) <u>See sensor layout guide</u>	WLXP	
Ceiling Configuration Std. 15/16" Lay-in or Std. 15/16" Tegular	G1 or T1	
Std. 9/16" Lay-in <b>or</b> Std. 9/16" Tegular	G2 or T2	
9/16" Slot-tee Tegular Tall 15/16" Lay-in <b>or</b> Tall 15/16" Tegular	G3 G4 or T4	
Tall 15/16" Tegular for specialty ceilings (0.5" drop.)	T4V	
Tall 9/16" Lay-in <b>or</b> Tall 9/16" Tegular Node 9/16" Tegular	G5 or T5 T6	
Factory Options	10	
(See page 6 for ordering details for DC, EC, EM & ECD.)	CD	
Chicago Plenum (Not available with Flex Whip, DLMI, NLT1 or NXE1.)	CP	
Daylight Circuit	_DC	

Std. 9/16" Lay-in or Std. 9/16" Tegular	G2 or T2
9/16" Slot-tee Tegular	G3
Tall 15/16" Lay-in or Tall 15/16" Tegular	G4 or T4
Tall 15/16" Tegular for specialty ceilings (0.5" drop.)	T4V
Tall 9/16" Lay-in <b>or</b> Tall 9/16" Tegular	G5 or T5
Node 9/16" Tegular	T6

†(4' mi

(Not available with Flex Whip, DLM1, NLT1 or NXE1.)	
Daylight Circuit	_DC
Emergency Circuit	_EC
Emergency Battery Pack <sup>†</sup>	_EM
Emergency Control Device†	_ECD
inimum. 6' minimum with patterns. Not available at corners. 120/277 Volt only.)	
6' New York City Flex Whip 120V or 277V	FNY1 or FN
6' Flex Whip	FW

# **Finish**

WH

ft in

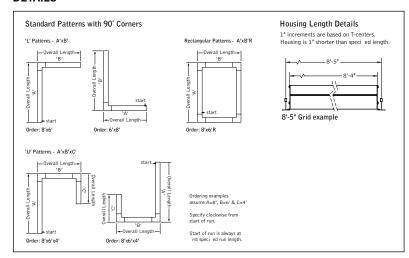
Matte White Housing

# **Luminaire Length** \_ft \_in

Specify luminaire/row length in 1" increments (2" minimum, lengths are nominal. 1" increments based on T-centers. Housing length is 1" shorter than specified. Leave blank for patterns. Smaller increments available, consult factory. Individual units cannot be joined in the field.)

Pattern Options (4' min. length. Not available with Pop-Down Lenses. Consult factory for other pattern options.) 'L' pattern A' x B' 'U' pattern A' x B' x C' Rectangular pattern A' x B' R

# **DETAILS**



# 4' PERFORMANCE CHART

Lumen Output	Nominal Lumens	Tested System Watts	BW	FL
275LF	1100	13.30	87.1	84.9
375LF	1500	17.34	90.6	88.3
625LF	2500	27.84	93.8	91.4
875LF	3500	37.22	98.7	96.2
1000LF	4000	42.39	98.9	96.4
1125LF	4500	50.27	93.7	91.3

LPW

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

TW 4' PERFOR	RMANCE CHAF	RT - REGRESS	LF	PW
Lumen	Nominal	Tested		
Output	Lumens	System Watts	SR	SRXP
275LF	1100	14.72	74.4	88.6
375LF	1500	19.36	77.5	92.3
625LF	2500	31.47	79.6	94.8
875LF	3500	42.01	83.4	99.4
1000LF	4000	50.68	79.2	94.3

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary  $\pm$  5%. Actual wattage may vary  $\pm$  5%.



# TW 4' PERFORMANCE CHART - POP-DOWN

		0.5"		1.5"	
Lumen Output	Nominal Lumens	Tested System Watts	LPW	Tested System Watts	LPW
275LF	1100	17.14	59.7	16.33	65.7
375LF	1500	22.79	61.4	21.58	68.3
625LF	2500	35.49	65.2	33.96	72.0
750LF	3000	42.39	65.4	40.28	72.7

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%.

# Multiplia

Wattage Multiplier	rs
--------------------	----

Lumen Multipliers		Wattage Mu	Itipliers
CRI	Multiplier	ССТ	Multiplier
80+	1.00	2700K	1.00
90+	0.89	3000K	0.92
		3500K	0.88
		4000K	0.86
		5000K	0.85
		5700K	0.87
		6500K	0.90

TW TUNA	ABLE WHITE			
Lui	minaire Series	F0.144	FSM	4L
	Seem 4 LED Shielding	FSM4L		
<b>-</b>	Batwing Lens ush Satin Lens	BW FL		
	Lens (1000LF max.)	SR		
Regress High Performance		SRXP PD05		
0.5" Pop-Down 1.5" Pop-Down Lens (750LF max	individual units only)	PD15		
	Lumen Output Lumens per foot EXP 3' min. with D1TW. EX BW 4' min. with LT1.)	275LF		
	umens per foot GRXP 3' min. with LT1.)	375LF		
625 L	umens per foot	625LF		
750 Lumens per foot (Po 875 Li	umens per foot	750LF 875LF		
	umens per foot umens per foot	1000LF 1125LF		
	r Temperature	IIZOLF		
Tunable White: 2700-6 Tunable White: 2700-6	500K, 80+ CRI	2765T 92765T		
<del></del>	cuits & Zones on-emergency	1C		
Consult Ordering Guid- multiple circuiting and	e on page 6 for	_C_Z_DL		
120	Voltage 0/277 UNV Volt	UNV	UN	V_
Control System & D				
Lutron T-Series DA	- 1% Dimming LI 1% Dimming	LT1 D1TW		
(DT6 control. Requires two addresses, one	•			
Lutron Athena V	•	LAWS		
, ,	- 1% Dimming**	NLT1		
Enlighted Smart Sensor  **(Consult factory. Not available wit	Pop-Down Lenses.)	ENL1		
	e sensor layout guide  Configuration			
Std. 15/16" Lay-in <b>or</b> Std	15/16" Tegular	G1 or T1		
Std. 9/16" Lay-in <b>or</b> Std. 9/16" S	l. 9/16" Tegular Slot-tee Tegular	G2 or T2 G3		
Tall 15/16" Lay-in <b>or</b> Tall Tall 15/16" Tegular for sp	_	G4 <b>or</b> T4 T4V		
	(0.5" drop.)			
	e 9/16" Tegular	G5 <b>or</b> T5 T6		
(See page 6 for ordering details for				
(Not available with Flex		СР		
	Daylight Circuit	_DC EC		
	ergency Circuit by Battery Pack†	_EM		
Emergency	Control Device <sup>†</sup>	_ECD		
6' New York City Flex Whi	†(Consult factory)	FNY1 or FNY2		
o New York City Hex Will	6' Flex Whip	FW		
Matta	Finish White Housing	WH	W	1
	ninaire Length		ft	in
Specify luminaire/row length in (2' minimum, lengths are nominal. 1" increment Housing length is 1" shorter than specified. Le Smaller increments available, consult factory.	n 1" increments its based on T-centers. eave blank for patterns.	_ft _in		

**Pattern Options** 

(4' min. length. Not available with Pop-Down Lenses. Consult factory for other pattern options.)

'L' pattern A' x B' 'U' pattern A' x B' x C' Rectangular pattern A' x B' R

# **SPECIFICATIONS**

# LED System

Proprietary linear LED module incorporates premium LEDs on a robust platform to achieve excellent thermal management. LEDs are placed to promote a uniform appearance. Available in 2700K, 3000K, 3500K or 4000K with CRI>80 or CRI>90, 3 SDCM or Tunable White (2700K-6500K), CRI>80, >90. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. LED modules are replaceable from below. Asymmetric, Flush, Batwing and Pop-Down lenses driver access from above. Regress lens driver access from below.

#### Construction

One piece extruded aluminum housing. 20 Ga. steel end caps. Steel driver compartment, flush lens only. Flush, Batwing and Pop-Down lens weights: 4' unit: 11 lbs., 8' unit: 22 lbs. Regress lens weights: 4' unit: 20 lbs., 8' unit: 40 lbs.

#### Optio

Asymmetric, Flush, Batwing lens extruded acrylic .085" thick with satin finish up to 8' continuous. Pop-Down lens extruded acrylic .06" thick with frosted finish, up to 8' continuous. Regress lens .118" thick acrylic lay-in lens. 22 Ga. reflector finished in High Reflectance White powder coat.

#### Electrical

Luminaires are pre-wired with factory installed branch circuit wiring and over-molded quick connects. Standard 120-277V constant current driver includes 0-10V analog dimming. Power factor >.9. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires. PoE runs require an independent PoE node and power feed for each luminaire section.

#### Emergency

Emergency Battery output - 10 watts for 90 minutes. Maximum mounting height: 19.2ft. Emergency Circuit with Connected Solutions (DLM1, LMFS1, LMFSD, NLT1, ENL1, CLM1, NXE1, WLXP) shipped standard with leads to connect UL924 compliant device, by others.

# Labels

UL and cUL listed. Suitable for Dry or Damp Locations, indoor use only.

#### Finish

Polyester powder coat applied over a multi-stage pre-treatment.

### Lumen Maintenance

 $\begin{tabular}{lll} Reported: & L70 > 61,000 & hours & Calculated: L70 & at > 480,000 & hours \\ & L90 > 61,000 & hours & L90 & at > 128,000 & hours \\ Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data. \\ \end{tabular}$ 

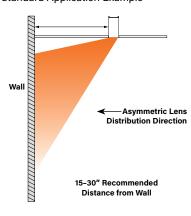
# Reliability

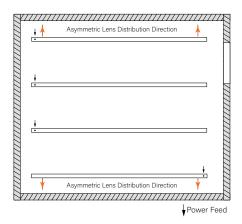
At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

### Warranty

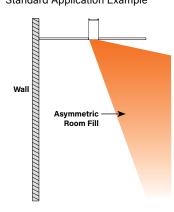
LED system rated for operation in ambient environments up to 25°C. 5-year limited warranty.

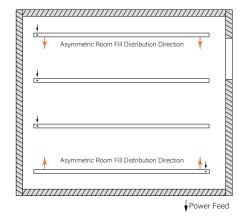
# **DIRECT ASYMMETRIC**Standard Application Example





# **DIRECT ASYMMETRIC ROOM FILL** Standard Application Example







Focal Point provides flexibility in meeting the needs of each project by integrating with several building lighting control systems. A variety of sensors, drivers and other components can be specified that allow the luminaires to communicate with wired and wireless networks. All zoning can be digitally reconfigured through the application software. Daylight harvesting, occupancy sensing, integration with HVAC systems, and individual controls enable the monitoring and modulating of light levels and temperature in order to save energy, reduce costs and maximize occupants' comfort. All Connected Solutions luminaires require a compatible building control system.<sup>†</sup>

Connected Solution		Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers
<b>La legrand</b> °		DLM1	LMFC-011	DLM	DLM	Enabled	No	Wired	Advance by Signify, Optotronic by eldoLED
WATTSTOPPER*		LMFS1	LMFS-601 & LMFI-111 LMFS-601	DLM Wireless	DLM	Enabled	No	Wireless	Advance by Signify  Optotronic by eldoLED (Dexal)
COOPER Lighting Solutions		WLXP	OEM-WAA	WaveLinx Wireless	WaveLinx Pro Trellix	Enabled	No	Wireless (WaveLinx Pro Wireless Area Controller)	Advance by Signify
@ ODESTRON	Connections located under access panel	D11	Specified	DALI	Crestron Züm Wireless & SpaceBuilder	Enabled	No	Wired	eldoLED ECOdrive
@CRESTRON.		L11	Driver	0-10V					Advance by Signify
ENCELIUM	CLM1 adds 0.78" to overall height.	CLM1	ZBHA-CLM- DIM-ENC	ZigBee	Encelium X Light Management System	Enabled	No	Wireless	Optotronic by eldoLED Advance by Signify
<b>€</b> Enlighted		ENL1	SU-5E-IOT	Enlighted RF	Enlighted	Integrated	Yes	Wireless	Advance by Signify
	Adds 0.78" to overall height.	LAW1	A-WN-D01- RF-WH	DALI, 0-10V	Athena Wireless	Enabled	No	Wireless	Advance by Signify
<b>%LUTRON</b>		LAWS	A-WN-D01- OCC-WH	DALI, 0-10V	Athena Wireless	Integrated	No	Wireless	Advance by Signify
	Connections located under access panel	LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	Lutron Hi-Lume
nLight	Connections located under access panel	NLT1	nEPS-60-IO	nLight	nLight	Enabled	No	Wired	eldoLED ECOdrive, eldoLED SOLOdrive
LIGHTING CONTROLS	NXE1 adds 1.00" to overall height.	NXE1	NXFM-LV	NX	NX Distributed Intelligence	Enabled	No	Wired	Optotronic by eldoLED

# Ordering Guide

# **Direct Only Linear Circuitry, Zones & Factory Options**



# **HOW TO USE THIS GUIDE**

Fill out the worksheet on the following page to specify your requirements for circuitry, zones, and factory options.

Refer to the run chart for standard run configurations, consult factory for custom configurations.

Complete the Totals / Ordering Codes at the bottom of the worksheet and add to your ordering logic on the cut sheet.

Submit the worksheet along with your order.

	TOTAL RUN LENGTH:		32ft JOB NAME:			FIXTURE TYPE:			
			SHARED ELECTRICAL FEED,			FACTORY OPTIONS			
	HOUSING	SECTION	NORMAL POWER			SEPARATE ELECTRICAL FEEDS			
т	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
EXAMPL	1	8	1C	1Z					1EM
Ę	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ord	ering Codes	2C	2 <b>Z</b>		1DC			1EM

ORDERING: FSM4L-FL-625LF-35K- 2C2Z -UNV-LD1-G2-1DC-1EM -WH-32ft

Section 1 EM BATTERY	Section 2	Section 3	Section 4
1C	2	c —	1DC
1Z	2	Z	

KEY	
C = Switching Circuit Switched Hot / Shared Neutral	DC = Daylight Circuit Switched Hot / Separate Neutral
Z = Dimming Zone Dimming Control Wires	EC = Emergency Circuit Switched Hot / Separate Neutral
DL = Daylight Zone Daylight Dimming Control Wires	EM = Emergency Battery Unswitched Hot / Shared Neutral
	ECD = Emergency Control Device Unswitched Hot / Separate Neutral

# **DEFAULTS**

- Zones and Factory Options illuminate entire sections from 4' to 8' in length.
- One shared or isolated circuit and zone required per housing section.
- Limit of one EM or ECD per housing section.
- Additional electrical feed required for applications greater than three shared circuits and zones.
- Each DC, EC and ECD require an additional electrical feed.
- ECD not available in the same housing section as EC.
- Longer lead times and additional pricing may apply for custom run configurations.

# **CUSTOM LENGTHS**

- If partial illumination of emergency or daylight section is required, indicate in ordering guide and add "partial illumination" in Order Notes. Drawing required.
- Engineering validation required, longer lead times may apply.

# Ordering Guide Worksheet



**Linear Circuitry, Zones & Factory Options** 

FOCAL POINT®

	TOTAL RUN LENGTH:		JOB NAME:			FIXTURE TYPE:			
			SHARED ELECTRICAL FEED, NORMAL POWER			FACTORY OPTIONS			
	HOUSING SECTION	SECTION LENGTH				SEPARATE ELECTRICAL FEEDS			
	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	ЕМ
	1								
	2								
	3								
	4								
	5								
	6								
	7								
WOF	8								
WORKSHEET	9								
ET	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								
	Totals / Ord	ering Codes							

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

# **RUN CHART**

HON CHAIL					
Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths	Run length (ft)	Housing Configuration Section Lengths
9	5 + 4	21	8 + 8 + 5	33	8 + 8 + 8 + 5 + 4
10	6 + 4	22	8 + 8 + 6	34	8 + 8 + 8 + 6 + 4
11	7 + 4	23	8 + 8 + 7	35	8 + 8 + 8 + 7 + 4
12	8 + 4	24	8 + 8 + 8	36	8 + 8 + 8 + 8 + 4
13	8 + 5	25	8 + 8 + 5 + 4	37	8 + 8 + 8 + 8 + 5
14	8 + 6	26	8 + 8 + 6 + 4	38	8 + 8 + 8 + 8 + 6
15	8 + 7	27	8 + 8 + 7 + 4	39	8 + 8 + 8 + 8 + 7
16	8 + 8	28	8 + 8 + 8 + 4	40	8 + 8 + 8 + 8 + 8
17	8 + 5 + 4	29	8 + 8 + 8 + 5	41	8 + 8 + 8 + 8 + 5 + 4
18	8 + 6 + 4	30	8 + 8 + 8 + 6	42	8 + 8 + 8 + 8 + 6 + 4
19	8 + 7 + 4	31	8 + 8 + 8 + 7	43	8 + 8 + 8 + 8 + 7 + 4
20	8 + 8 + 4	32	8 + 8 + 8 + 8	44	8 + 8 + 8 + 8 + 8 + 4

Run length (ft)	Housing Configuration Section Lengths
45	8 + 8 + 8 + 8 + 8 + 5
46	8 + 8 + 8 + 8 + 8 + 6
47	8 + 8 + 8 + 8 + 8 + 7
48	8 + 8 + 8 + 8 + 8 + 8

Standard run configurations, consult factory for custom configurations.