BURKE MOUNTAIN DISCOVERY CENTRE + COFFEE HOUSE DRAINAGE + OTHER EQUIPMENT SPECIFICATIONS

ISSUED FOR COFFEE HOUSE RFP: 2020-10-02

GENERAL NOTES:

- 1. To be read in conjunction with architectural, electrical, mechanical, structural, civil drawings, specifications and geotechnical reports
- 2. Provide current, up-to-date product specifications as submittals for review by owner / consultants
- 3. Report products with long lead times or unavailable to the attention of the owner / consultants



FD-100-C-A5-1

Floor Drain with Round Strainer

Components:

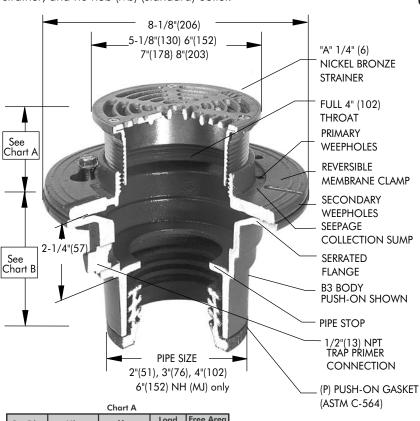


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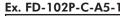
Str. Dia.	Min.	Max.	Load Rating	Free Area Sq. In.
6"(152)	11/16"(17)	2-3/4"(70)	*MD *MD *MD *MD	8 9 12 18

* The load classifications are in accordance with the American National Standards ASME A112.21.1M ASME Ratings are as follows:

MD - Safe Live Load 2000-4999 lbs.(900-2250kg) The above categories are given as a guide only. Please consult factory.

Chart B

	Std.	P	T	Х	60/61
Pipe Size	No Hub	Push On	Female Thread	Inside Caulk	PVC/ ABS
2"(51) 3"(76)	3-5/8"(92)	4-1/4"(108)		4-1/2"(114)	3-3/4"(95)
4"(102) 6"(152)	3-5/8"(92) 3-1/2"(89)	4-1/4"(108)	4-1/4"(108)	4-1/2"(114)	4"(102)



P	Pipe Sizing (Select One)					
Suffix Description						
2 2"(51) Pipe Size						
3	3 3"(76) Pipe Size					
4	4 4"(102) Pipe Size					
6	6"(152) Pipe Size					

Outlet Type (Select One)						
Suffix	Description					
NH	No Hub (MJ)	[.				
Р	Push On	Т				

1 11 1		
Р	Push On	
Т	Threaded Outlet	
Χ	Inside Caulk	

Strainer (Select One) Suffix Description A5-1 5"(127) Diameter, Nickel Bronze A6-1 6"(152) Diameter, Nickel Bronze A7-1 7"(178) Diameter, Nickel Bronze

A8-1 8"(203) Diameter, Nickel Bronze Options (Select One or More)

Suffix	Description	
-5	Sediment Bucket	
-6	Vandal Proof	
-8	Backwater Valve (3" / 4" Only)	
-12	Galvanized Top	
-13	All Galvanized	
-15	Strainer Extension (DD-50)	
-113M	Special Epoxy from 3M Range	
-F4-50	4" Round Cast Iron Funnel	
-F4-1	4" Round Nickel Bronze Funnel	
-F6-1	6" Round Nickel Bronze Funnel	
-G-50	4x9" Oval Cast Iron Funnel	
-G-1	4x9" Oval Nickel Bronze Funnel	
-SO	Side Outlet	
-Z	Elastomeric Flange	
		_

Optional	Body Material	(NH	Only)
Suffix	Description		

-60	PVC Body w/Socket Outlet	
-61	ABS Body w/Socket Outlet	

Job Name ————	Contractor —
Job Location —	Contractor's P.O. No.
Engineer —	Representative -

WATTS Drainage reserves the right to modify or change product design or construction without prior notice and without incurring any obligation to make similar changes and modifications to products previously or subsequently sold. See your WATTS Drainage representative for any clarification. Dimensions are subject to manufacturing tolerances.



CANADA: 5435 North Service Road, Burlington, ON, L7L 5H7 TEL: 905-332-6718 TOLL-FREE: 1-888-208-8927 Website: www.wattsdrainage.ca



FD-100-C-A5-1

Floor Drain with Round Strainer

Components:

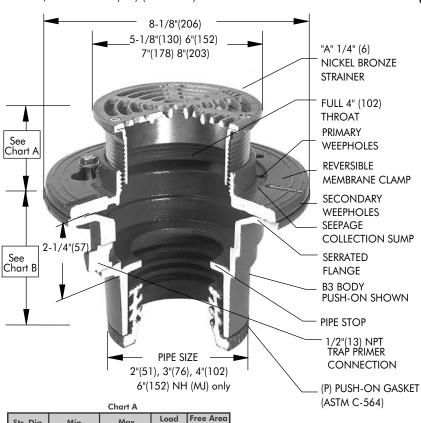


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Str. Dia.	Min.	Max.	Load Rating	Free Area Sq. In.
6"(152)	11/16"(17)	2-3/4"(70)	*MD *MD *MD *MD	8 9 12 18

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Chart B

	Std.	P	Т	Х	60/61
Pipe Size	No Hub	Push On	Female Thread	Inside Caulk	PVC/ ABS
2"(51) 3"(76)	3-5/8"(92) 3-5/8"(92)	, , , ,	4-1/4"(108) 4-1/4"(108)		
4"(102)	,	4-1/4"(108)			
6"(152)	3-1/2 (09)				

Ex. FD-102P-C-A5-1

P	Pipe Sizing (Select One)						
Suffix	Description						
2	2"(51) Pipe Size	П					
3	3 3"(76) Pipe Size						
4	4"(102) Pipe Size						
6	6"(152) Pipe Size						

Outlet Type (Select One) Suffix Description

NH	No Hub (MJ)	1
Р	Push On	
T	Threaded Outlet	

Strainer (Select One)

Inside Caulk

JUILIX	Description
A5-1	5"(127) Diameter, Nickel Bronze 🗹
A6-1	6"(152) Diameter, Nickel Bronze
A7-1	7"(178) Diameter, Nickel Bronze
A8-1	8"(203) Diameter, Nickel Bronze

Options (Select One or More) Suffix Description

	**** P **			
-5 -6	Sediment Bucket Vandal Proof			
-8	Backwater Valve (3" / 4" Only)			
-12	Galvanized Top			
-13	All Galvanized			
-15	Strainer Extension (DD-50)			
-113M	Special Epoxy from 3M Range			
-F4-50	4" Round Cast Iron Funnel			
-F4-1	4" Round Nickel Bronze Funnel			
-F6-1	6" Round Nickel Bronze Funnel			
-G-50	4x9" Oval Cast Iron Funnel			
-G-1	4x9" Oval Nickel Bronze Funnel			
-SO	Side Outlet			
-Z	Elastomeric Flange			
Optional Body Material (NH Only)				

Ophonal Body Malerial (INTI Only)

JUILIX	Description	
-60 -61	PVC Body w/Socket Outlet ABS Body w/Socket Outlet	

Job Name —	Contractor
Job Location —	Contractor's P.O. No.
Engineer-	Representative

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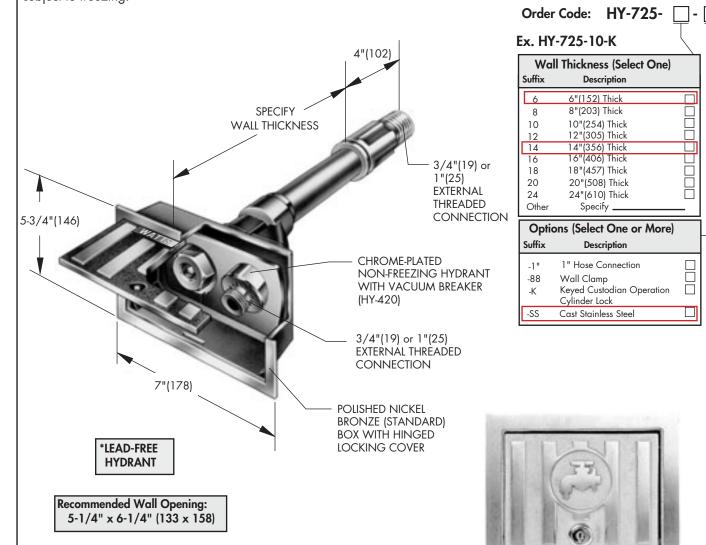
HY-725

Tag: _____

Non-Freeze Wall Hydrant with NB Box, Integral Vacuum Breaker

SPECIFICATION: WATTS Drainage Products HY-725 concealed non-freeze key operated wall hydrant with nickel bronze (standard) box and door, chrome plated hydrant face, integral vacuum breaker, 3/4"(19) hose connection, all bronze head, seat casting and internal working parts, galvanized wall casing, and hydrant key.

FUNCTION: For recessed installation in exterior walls where self-draining integral vacuum breaker is required in areas subject to freezing.



Standard finish is polished nickel bronze.

Job Name	Contractor
Job Location	Contractor's P.O. No.
Engineer	Representative

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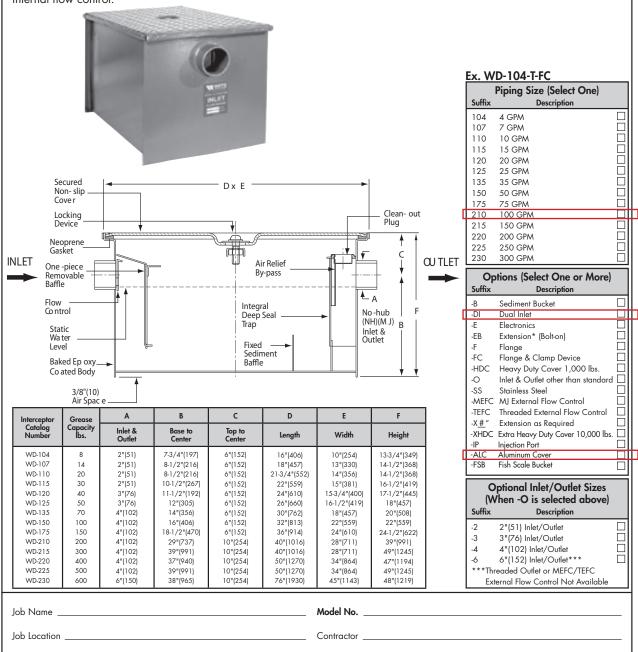


WD-210-DI

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Grease Interceptor

SPECIFICATION: Watts Drainage Products WD Series epoxy coated inside and outside fabricated steel grease interceptor with flow rating of 4 to 300 GPM and grease capacity of 8 to 600 lbs. Unit shall include one piece removable baffle assembly, code approved deep seal trap, secured and gasketed non slip cover, NH (MJ) (standard) inlet and outlet and internal flow control.



Specification Prainage Products

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CANADA: 5435 North Service Road, Burlington, ON, L7L 5H7 TEL: 905-332-6718 TOLL-FREE: 1-888-208-8927 Website: www.wattscanada.ca

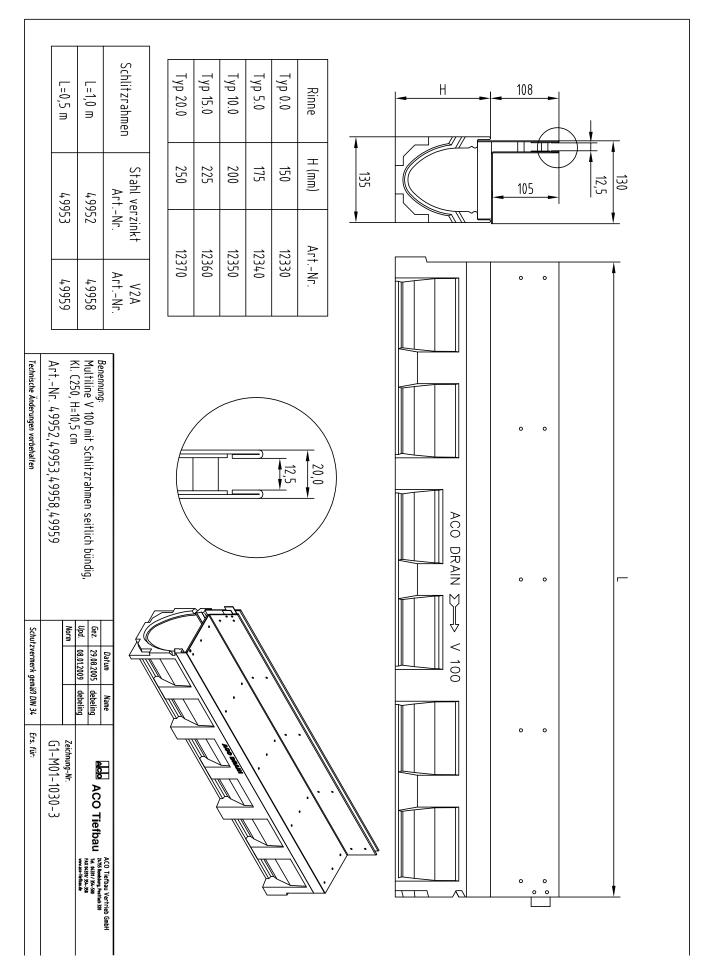
Representative



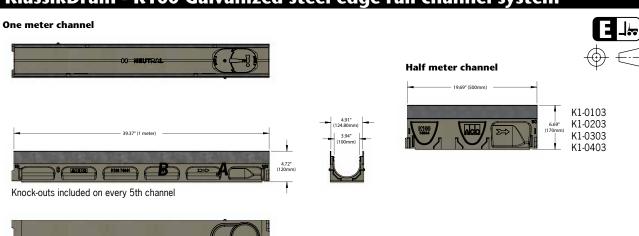
ES-WD-WD SERIES CANADA 0110

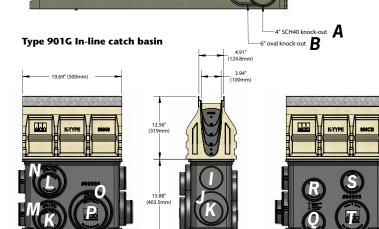
Engineer

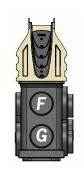
SD-1



KlassikDrain - K100 Galvanized steel edge rail channel system





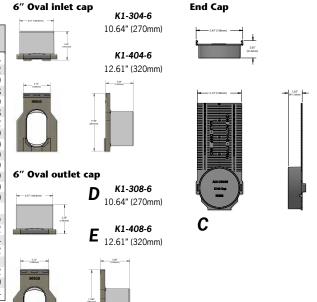


Total capacity = 10.49 gallons

Outlet flow rates

Outlet	Product	Outlet size (Sch. 40)	Invert Depth	GPM	CFS
A	Bottom outlet - K00	4" round	3.94"	108	0.24
Α	Bottom outlet - K40	4" round	11.81"	187	0.42
В	Bottom outlet - K00	6" oval	3.94"	177	0.39
В	Bottom outlet - K40	6" oval	11.81"	306	0.68
C	End outlet - K20	4" round	7.87"	132	0.29
C	End outlet - K40	4" round	11.81"	171	0.38
D	K1-308-6 6" outlet cap	6" oval	9.84"	233	0.52
E	K1-408-6 6" outlet cap	6" oval	11.81"	264	0.59
F	Type K1-901G	4" round	19.30"	226	0.50
G	Type K1-901G	4" round	25.67"	265	0.59
н	Type K1-901G	4" round	25.30"	263	0.59
1	Type K1-901G	4" round	18.56"	222	0.49
J	Type K1-901G	6" round	25.85"	586	1.30
K	Type K1-901G	4" round	26.43"	269	0.60
L	Type K1-901G	4" round	19.36"	227	0.51
M	Type K1-901G	6" round	27.30"	604	1.35
N	Type K1-901G	6" round	19.99"	505	1.12
0	Type K1-901G	8" round	27.30"	1051	2.34
P	Type K1-901G	6" round	26.43"	593	1.32
Q	Type K1-901G	4" round	27.17"	273	0.61
R	Type K1-901G	4" round	20.68"	235	0.52
S	Type K1-901G	4" round	18.99"	224	0.50
Т	Type K1-901G	6" round	27.17"	6.02	1.34

Note: These are the pipe flow rates at the specified outlet, **NOT** channel flow rates. Catch basin flow rates are without trash bucket - using trash bucket reduces flow.





KlassikDrain - K100 Galvanized steel edge rail channel system



		leve		
Description	Part No.	Inve Inches [©]	rτ mm [©]	Weight
				Lbs.
K1-00 Neutral channel - 39.37" (1m) [©]	74041	3.94	100	28.1
K1-1 Sloped channel - 39.37" (1m)	74001	4.13	105	28.1
K1-2 Sloped channel - 39.37" (1m)	74002	4.33	110	28.9
K1-3 Sloped channel - 39.37" (1m)	74003	4.53	115	29.7
K1-4 Sloped channel - 39.37" (1m)	74004	4.72	120	30.5
K1-5 Sloped channel - 39.37" (1m) [⊕]	74005	4.92	125	31.3
K1-6 Sloped channel - 39.37" (1m)	74006	5.12	130	32.1
K1-7 Sloped channel - 39.37" (1m)	74007	5.31	135	32.9
K1-8 Sloped channel - 39.37" (1m)	74008	5.51	140	33.7
K1-9 Sloped channel - 39.37" (1m)	74009	5.71	145	34.5
K1-10 Sloped channel - 39.37" (1m) ^D	74010	5.91	150	35.3
K1-010 Neutral channel - 39.37" (1m) [©]	74043	5.91	150	35.3
K1-0103 Neutral channel - 19.69" (0.5m) [®]	74044	5.91	150	17.0
K1-11 Sloped channel - 39.37" (1m)	74011	6.10	155	36.1
K1-12 Sloped channel - 39.37" (1m)	74012	6.30	160	36.9
K1-13 Sloped channel - 39.37" (1m)	74013	6.50	165	37.7
K1-14 Sloped channel - 39.37" (1m)	74014	6.69	170	38.5
K1-15 Sloped channel - 39.37" (1m) [©]	74015	6.89	175	39.3
K1-16 Sloped channel - 39.37" (1m)	74016	7.09	180	40.1
K1-17 Sloped channel - 39.37" (1m)	74017	7.28	185	40.9
K1-18 Sloped channel - 39.37" (1m)	74018	7.48	190	41.7
K1-19 Sloped channel - 39.37" (1m)	74019	7.68	195	42.5
K1-20 Sloped channel - 39.37" (1m) ^D	74020	7.87	200	43.4
K1-020 Neutral channel - 39.37" (1m) ^D	74045	7.87	200	43.4
K1-0203 Neutral channel - 19.69" (0.5m) [®]	74046	7.87	200	20.5
K1-21 Sloped channel - 39.37" (1m)	74021	8.07	205	44.2
K1-22 Sloped channel - 39.37" (1m)	74022	8.27	210	45.0
K1-23 Sloped channel - 39.37" (1m)	74023	8.46	215	45.8
K1-24 Sloped channel - 39.37" (1m)	74024	8.66	220	46.6
K1-25 Sloped channel - 39.37" (1m) ^D	74025	8.86	225	47.4
K1-26 Sloped channel - 39.37" (1m)	74026	9.06	230	48.2
K1-27 Sloped channel - 39.37" (1m)	74027	9.25	235	49.0

	nvert			
Description	Part No.	Inches®		Weight
	NO.	inches	mm®	Lbs.
K1-28 Sloped channel - 39.37" (1m)	74028	9.45	240	49.8
K1-29 Sloped channel - 39.37" (1m)	74029	9.65	245	50.6
K1-30 Sloped channel - 39.37" (1m) $^{\oplus}$	74030	9.84	250	51.4
K1-030 Neutral channel - 39.37" (1m) [®]	74047	9.84	250	51.4
K1-0303 Neutral channel - 19.69" (0.5m) [®]	74048	9.84	250	24.0
K1-31 Sloped channel - 39.37" (1m)	74031	10.04	255	52.2
K1-32 Sloped channel - 39.37" (1m)	74032	10.24	260	53.0
K1-33 Sloped channel - 39.37" (1m)	74033	10.43	265	53.8
K1-34 Sloped channel - 39.37" (1m)	74034	10.63	270	54.6
K1-35 Sloped channel - 39.37" (1m) ^D	74035	10.83	275	55.4
K1-36 Sloped channel - 39.37" (1m)	74036	11.02	280	56.2
K1-37 Sloped channel - 39.37" (1m)	74037	11.22	285	57.0
K1-38 Sloped channel - 39.37" (1m)	74038	11.42	290	57.9
K1-39 Sloped channel - 39.37" (1m)	74039	11.61	295	58.7
K1-40 Sloped channel - 39.37" (1m) ^D	74040	11.81	300	59.5
K1-040 Neutral channel - 39.37" (1m) [®]	74049	11.81	300	59.5
K1-0403 Neutral channel - 19.69" (0.5m) [®]	74050	11.81	300	27.5
K1-901G In-line catch basin - 19.69" (0.5m)®	94608	28.81	701.9	52.6
K1-621G catch basin - 19.69" (0.5m) [©]	94617	28.84	732.5	55.8
K1-631G catch basin - 19.69" (0.5m)®	94631	40.84	1037.4	65.8
K1-Series 600 Optional plastic riser	99902	-	-	10.0
Foul air trap - fits both 900 & 600 series basins	90854	-	-	1.2
K1-304-6 6" Inlet Cap	96839	9.84	250	5.2
K1-308-6 6" Outlet Cap	96840	9.84	250	5.0
K1-404-6 6" Inlet Cap	96834	11.81	300	6.0
K1-408-6 6" Outlet Cap	96836	11.81	300	5.8
Universal end cap	96822	11.81	300	0.4
Debris strainer for 4" bottom knockout	93488	-	-	0.2
4" Oval to 6" round outlet adapter	95140	-	-	1.1
K1-Installation device	97477	-	-	2.8
Grate removal tool	01318	-	-	0.3
K1-QuickLok locking bar	02899	-	-	0.1

Notes:

- 1. This channel offers a bottom knockout feature; 4" round/6" oval.
- Inverts shown are for the male end; for female invert depth subtract 5mm (≈0.2") from the male invert (except for neutral channels, where it will be same as male invert).
 To calculate the overall channel depth add 20mm (≈0.8") to invert depth.
- 3. This catch basin kit includes a polymer concrete top, removable Quicklok locking bar, trash bucket and plastic base. Select an appropriate grate.
- 4. This catch basin kit includes a polymer concrete top, removable Quicklok locking bar, deep trash bucket, plastic riser and plastic base. Select an appropriate grate.

Specifications

General

The surface drainage system shall be ACO Drain K100 complete with gratings secured with 'QuickLok' locking as manufactured by ACO Polymer Products, Inc. or approved equal.

Materials

The trench system bodies shall be manufactured from polyester polymer concrete with the minimum properties as follows:

Compressive strength: 14,000 psi Flexural strength: 4,000 psi

Water absorption 0.07% Frost proof YES Salt proof YES Dilute acid and alkali resistant YES

The nominal clear opening shall be 4" (100mm) with overall width of 5.12" (130mm). Pre-cast units shall be manufactured with either an invert slope of 0.5% or with neutral invert and have a wall thickness of at least 0.50" (13mm). Each unit will feature a partial radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast in anchoring keys on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface. The galvanized steel edge rail will be integrally

cast in by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail. Each edge rail shall be at least 3/32" (2.5mm) thick.

Grates

Grates shall be specified. See separate ACO Spec Info grate sheets for details. After removal of grates and 'QuickLok' bar there shall be uninterrupted access to the trench to aid maintenance.

Installation

The trench drain system shall be installed in accordance with the manufacturer's installation instructions and recommendations.

ACO Polymer Products, Inc.

Northeast Sales Office West Sales Office

9470 Pinecone Drive Mentor, OH 44060 Tel: (440) 639-7230 Toll free: (800) 543-4764 Fax: (440) 639-7235 West Sales Office 825 W. Beechcraft St. Casa Grande, AZ 85122 Tel: (520) 421-9988 Toll Free: (888) 490-9552 Fax: (520) 421-9899 Southeast Sales Office 4211 Pleasant Road Fort Mill, SC 29708 Toll free: (800) 543-4764

Fax: (803) 802-1063

Follow us on

Fig. 1900

Fig. 190

Electronic Contact info@ACODrain.us www.ACODrain.us

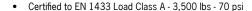


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ACO DRAIN

Type 410D/412D Perforated galvanized steel grate (ADA)

Product Features



- Uses 'DrainLok' boltless locking system
- Suitable for use with K100, KS100, and H100K-8 channels
- Manufactured from 16 gauge galvanized steel
- Patented reinforcement underneath designed to prevent bowing and collapse
- Complies with ADA American Disabilities Act of 1990 Section 4.5.4
- Complies with ASME: A112.6.3 2001: Section 7.12 Heel Resistant Strainers and Grates
- Bicycle Tire Penetration Resistant to AS3996-2006



Specifications

The surface drainage system shall be ACO Drain K100, KS100, and H100K-8 channels*, complete with ACO Type 410D/412D Perforated galvanized steel grate with 'DrainLok' locking as manufactured by ACO Polymer Products, Inc. or similar approved.

The covers shall be manufactured from galvanized steel and have **minimum** properties as follows:-

- . Independently certified to meet Load Class A to EN 1433 - 3,500 lbs - 70 psi
- 16 gauge galvanized steel
- Intake area of 14.1 sq. in. (91.0 cm²) per half meter of grate

The overall width of 4.84" (123mm) and overall length of 39.37" (1000mm) (Type 410D) and 19.69" (500mm)(Type 412D). Perforations measure 0.25" (6.35mm) in diameter.

The trench drain system and grates shall be installed in accordance with the manufacturer's installation instructions and recommendations.

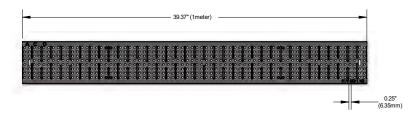
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Type 410D/412D Perforated galvanized steel grate (ADA)



Plan view



Side elevation

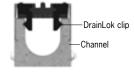
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Specificat



Description	Part No.	Length inches <i>(mm)</i>	Width inches (mm)	Weight lbs.
DrainLok grates Type 410D perforated galvanized grate Type 412D perforated galvanized grate	12666	39.37 (1000)	4.84 (1 <i>23</i>)	6.3
	12667	19.69 (500)	4.84 (1 <i>23</i>)	3.2

'DrainLok' locking mechanism



ACO DrainLok™ is a patented, boltless locking system that removes the need for bolts and bars and improves the hydraulic capacity of the channel. The DrainLok™ mechanism simply clips into the channel edge rail for rapid installation. ACO DrainLok™ grates are fitted with an anti-shunt mechanism that restricts unwanted grate movement when installed, improving durability and longevity of the system.

ACO Polymer Products, Inc.

Northeast Sales Office

9470 Pinecone Drive Mentor, OH 44060 Tel: (440) 639-7230 Toll free: (800) 543-4764 Fax: (440) 639-7235

West Sales Office

825 W. Beechcraft St. Casa Grande, AZ 85122 Tel: (520) 421-9988 Toll Free: (888) 490-9552 Fax: (520) 421-9899

Southeast Sales Office

4211 Pleasant Road Fort Mill, SC 29708 Toll free: (800) 543-4764 Fax: (803) 802-1063



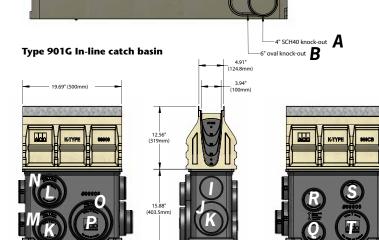
Electronic Contact: info@ACODrain.us www.ACODrain.us

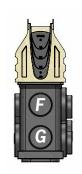


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KlassikDrain - K100 Galvanized steel edge rail channel system

One meter channel Half meter channel K1-0103 K1-0203 K1-0303 K1-0403 Knock-outs included on every 5th channel



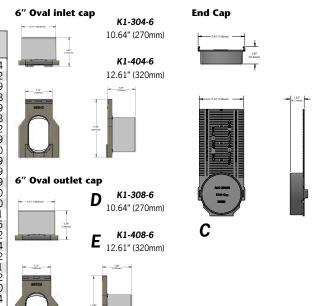


Total capacity = 10.49 gallons

Outlet flow rates

Outlet	Product	Outlet size (Sch. 40)	Invert Depth	GPM	CFS
Α	Bottom outlet - K00	4" round	3.94"	108	0.24
Α	Bottom outlet - K40	4" round	11.81"	187	0.42
В	Bottom outlet - K00	6" oval	3.94"	177	0.39
В	Bottom outlet - K40	6" oval	11.81"	306	0.68
C	End outlet - K20	4" round	7.87"	132	0.29
C	End outlet - K40	4" round	11.81"	171	0.38
D	K1-308-6 6" outlet cap	6" oval	9.84"	233	0.52
E	K1-408-6 6" outlet cap	6" oval	11.81"	264	0.59
F	Type K1-901G	4" round	19.30"	226	0.50
G	Type K1-901G	4" round	25.67"	265	0.59
Н	Type K1-901G	4" round	25.30"	263	0.59
I	Type K1-901G	4" round	18.56"	222	0.49
J	Type K1-901G	6" round	25.85"	586	1.30
K	Type K1-901G	4" round	26.43"	269	0.60
L	Type K1-901G	4" round	19.36"	227	0.51
M	Type K1-901G	6" round	27.30"	604	1.35
N	Type K1-901G	6" round	19.99"	505	1.12
0	Type K1-901G	8" round	27.30"	1051	2.34
P	Type K1-901G	6" round	26.43"	593	1.32
Q	Type K1-901G	4" round	27.17"	273	0.61
R	Type K1-901G	4" round	20.68"	235	0.52
S	Type K1-901G	4" round	18.99"	224	0.50
T	Type K1-901G	6" round	27.17"	6.02	1.34

Note: These are the pipe flow rates at the specified outlet, NOT channel flow rates. Catch basin flow rates are without trash bucket - using trash bucket reduces flow.





KlassikDrain - K100 Galvanized steel edge rail channel system



	Part	Inve	ert	Weight
Description	No.	Inches®	mm ²	Lbs.
K1-00 Neutral channel - 39.37" (1m)	74041	3.94	100	28.1
K1-1 Sloped channel - 39.37" (1m)	74001	4.13	105	28.1
K1-2 Sloped channel - 39.37" (1m)	74002	4.33	110	28.9
K1-3 Sloped channel - 39.37" (1m)	74003	4.53	115	29.7
K1-4 Sloped channel - 39.37" (1m)	74004	4.72	120	30.5
K1-5 Sloped channel - 39.37" (1m) [©]	74005	4.92	125	31.3
K1-6 Sloped channel - 39.37" (1m)	74006	5.12	130	32.1
K1-7 Sloped channel - 39.37" (1m)	74007	5.31	135	32.9
K1-8 Sloped channel - 39.37" (1m)	74008	5.51	140	33.7
K1-9 Sloped channel - 39.37" (1m)	74009	5.71	145	34.5
K1-10 Sloped channel - 39.37" (1m) ^D	74010	5.91	150	35.3
K1-010 Neutral channel - 39.37" (1m) [©]	74043	5.91	150	35.3
K1-0103 Neutral channel - 19.69" (0.5m) [®]	74044	5.91	150	17.0
K1-11 Sloped channel - 39.37" (1m)	74011	6.10	155	36.1
K1-12 Sloped channel - 39.37" (1m)	74012	6.30	160	36.9
K1-13 Sloped channel - 39.37" (1m)	74013	6.50	165	37.7
K1-14 Sloped channel - 39.37" (1m)	74014	6.69	170	38.5
K1-15 Sloped channel - 39.37" (1m) ^D	74015	6.89	175	39.3
K1-16 Sloped channel - 39.37" (1m)	74016	7.09	180	40.1
K1-17 Sloped channel - 39.37" (1m)	74017	7.28	185	40.9
K1-18 Sloped channel - 39.37" (1m)	74018	7.48	190	41.7
K1-19 Sloped channel - 39.37" (1m)	74019	7.68	195	42.5
K1-20 Sloped channel - 39.37" (1m) ^D	74020	7.87	200	43.4
K1-020 Neutral channel - 39.37" (1m) [®]	74045	7.87	200	43.4
K1-0203 Neutral channel - 19.69" (0.5m) [®]	74046	7.87	200	20.5
K1-21 Sloped channel - 39.37" (1m)	74021	8.07	205	44.2
K1-22 Sloped channel - 39.37" (1m)	74022	8.27	210	45.0
K1-23 Sloped channel - 39.37" (1m)	74023	8.46	215	45.8
K1-24 Sloped channel - 39.37" (1m)	74024	8.66	220	46.6
K1-25 Sloped channel - 39.37" (1m) ^D	74025	8.86	225	47.4
K1-26 Sloped channel - 39.37" (1m)	74026	9.06	230	48.2
K1-27 Sloped channel - 39.37" (1m)	74027	9.25	235	49.0

	Part	Inve	Weight	
Description	No.	Inches®	mm [©]	Lbs.
K1-28 Sloped channel - 39.37" (1m)	74028	9.45	240	49.8
K1-29 Sloped channel - 39.37" (1m)	74029	9.65	245	50.6
K1-30 Sloped channel - 39.37" (1m) [©]	74030	9.84	250	51.4
K1-030 Neutral channel - 39.37" (1m) [®]	74047	9.84	250	51.4
K1-0303 Neutral channel - 19.69" (0.5m) [®]	74048	9.84	250	24.0
K1-31 Sloped channel - 39.37" (1m)	74031	10.04	255	52.2
K1-32 Sloped channel - 39.37" (1m)	74032	10.24	260	53.0
K1-33 Sloped channel - 39.37" (1m)	74033	10.43	265	53.8
K1-34 Sloped channel - 39.37" (1m)	74034	10.63	270	54.6
K1-35 Sloped channel - 39.37" (1m) [©]	74035	10.83	275	55.4
K1-36 Sloped channel - 39.37" (1m)	74036	11.02	280	56.2
K1-37 Sloped channel - 39.37" (1m)	74037	11.22	285	57.0
K1-38 Sloped channel - 39.37" (1m)	74038	11.42	290	57.9
K1-39 Sloped channel - 39.37" (1m)	74039	11.61	295	58.7
K1-40 Sloped channel - 39.37" (1m) [®]	74040	11.81	300	59.5
K1-040 Neutral channel - 39.37" (1m)	74049	11.81	300	59.5
K1-0403 Neutral channel - 19.69" (0.5m)	74050	11.81	300	27.5
K1-901G In-line catch basin - 19.69" (0.5m)®	94608	28.81	701.9	52.6
K1-621G catch basin - 19.69" (0.5m) [©]	94617	28.84	732.5	55.8
K1-631G catch basin - 19.69" (0.5m)®	94631	40.84	1037.4	65.8
K1-Series 600 Optional plastic riser	99902	-	-	10.0
Foul air trap - fits both 900 & 600 series basins	90854	-	-	1.2
K1-304-6 6" Inlet Cap	96839	9.84	250	5.2
K1-308-6 6" Outlet Cap	96840	9.84	250	5.0
K1-404-6 6" Inlet Cap	96834	11.81	300	6.0
K1-408-6 6" Outlet Cap	96836	11.81	300	5.8
Universal end cap	96822	11.81	300	0.4
Debris strainer for 4" bottom knockout	93488	-	-	0.2
4" Oval to 6" round outlet adapter	95140	-	-	1.1
K1-Installation device	97477	-	-	2.8
Grate removal tool	01318	-	-	0.3
K1-QuickLok locking bar	02899	-	-	0.1

Notes:

- 1. This channel offers a bottom knockout feature; 4" round/6" oval.
- 2. Inverts shown are for the male end; for female invert depth subtract 5mm (≈0.2") from the male invert (except for neutral channels, where it will be same as male invert). To calculate the overall channel depth add 20mm (≈0.8") to invert depth.
- 3. This catch basin kit includes a polymer concrete top, removable Quicklok locking bar, trash bucket and plastic base. Select an appropriate grate.
- 4. This catch basin kit includes a polymer concrete top, removable Quicklok locking bar, deep trash bucket, plastic riser and plastic base. Select an appropriate grate.

Specifications

General

The surface drainage system shall be ACO Drain K100 complete with gratings secured with 'QuickLok' locking as manufactured by ACO Polymer Products, Inc. or approved equal.

Materials

The trench system bodies shall be manufactured from polyester polymer concrete with the minimum properties as follows:

14,000 psi Compressive strength: Flexural strength: 4,000 psi

0.07% Water absorption YES Frost proof YES Salt proof Dilute acid and alkali resistant

The nominal clear opening shall be 4" (100mm) with overall width of 5.12" (130mm). Pre-cast units shall be manufactured with either an invert slope of 0.5% or with neutral invert and have a wall thickness of at least 0.50" (13mm). Each unit will feature a partial radius in the trench bottom and a male to female interconnecting end profile. Units shall have horizontal cast in anchoring keys on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface. The galvanized steel edge rail will be integrally

cast in by the manufacturer to ensure maximum homogeneity between polymer concrete body and edge rail. Each edge rail shall be at least 3/32" (2.5mm) thick.

Grates shall be specified. See separate ACO Spec Info grate sheets for details. After removal of grates and 'QuickLok' bar there shall be uninterrupted access to the trench to aid maintenance.

Installation

The trench drain system shall be installed in accordance with the manufacturer's installation instructions and recommendations

ACO Polymer Products, Inc.

Northeast Sales Office

9470 Pinecone Drive Mentor, OH 44060 Tel: (440) 639-7230 Toll free: (800) 543-4764 Fax: (440) 639-7235

West Sales Office 825 W. Beechcraft St Casa Grande, AZ 85122 Tel: (520) 421-9988 Toll Free: (888) 490-9552

Fax: (520) 421-9899

Southeast Sales Office 4211 Pleasant Road Fort Mill, SC 29708 Toll free: (800) 543-4764

Fax: (803) 802-1063

Follow us on f B Tube **Electronic Contact:**

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BURKE MOUNTAIN DISCOVERY CENTRE + COFFEE HOUSE HVAC EQUIPMENT SPECIFICATIONS

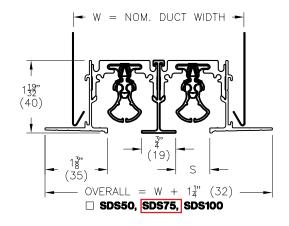
ISSUED FOR COFFEE HOUSE RFP: 2020-10-02

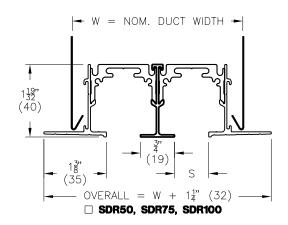
GENERAL NOTES:

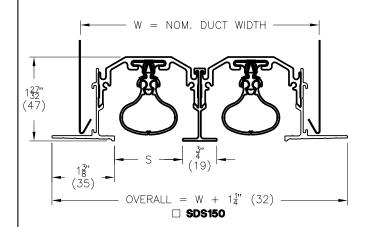
- 1. To be read in conjunction with architectural, electrical, mechanical, structural drawings and specifications
- 2. Provide current, up-to-date product specifications as submittals for review by owner / consultants
- 3. Report products with long lead times or unavailable to the attention of the owner / consultants

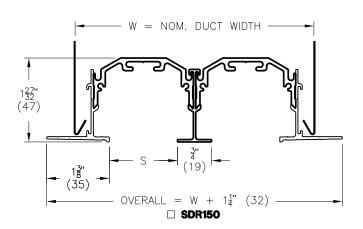


SDS / SDR LINEAR SLOT DIFFUSER - TYPE 8, 8A CONCEALED PLASTER FRAME APPLICATION









- PATTERN CONTROLLERS B17 BLACK
- OUTER FRAMES MILL FINISH

 □ CENTER TEE B12 WHITE (OPTIONAL FINISHES AVAILABLE)

MATERIAL:

- EXTRUDED ALUMINUM FRAME
- EXTRUDED ALUMINUM PATTERN CONTROLLERS ON MODELS SDS50, SDS150
- ROLLFORMED STEEL OR EXTRUDED ALUMINUM PATTERN CONTROLLERS ON SDS75, SDS100

NOTE:

- MINIMUM LENGTH 8" (203)
- MAXIMUM SECTION LENGTH 72" (1829)
- UNITS 6 SLOT AND LARGER SUPPLIED WITH 1" (25) REINFORCING ANGLES ATTACHED TO DIFFUSER
- 180° AIR PATTERN ADJUSTMENT AVAILABLE
- TAPING AND PLASTER FINISHING BY OTHERS
- SEE INSTALLATION INSTRUCTION 1100044
- USE WITH TYPE 2 SDB / SDA PLENUM, OR UP / UPL FACTORY TOLERANCE \pm $^{1}/_{32}$ " (1)

SUPPLY DIFFUSERS: **RETURNS:** SUPPLY DIFFUSIONS.

SDS50 - ½" SLOT

SDS75 - ¾" SLOT

SDS100 - 1" SLOT

SDS100 - 1" SLOT □ SDR50 - 1/2" SLOT U SUSSU - 1/2 SLUT U SURSU - 1/2 SLUT U SURSU - 1/2 SLUT U SDR75 - 3/4" SLOT U SDR75 - 3/4" SLOT U SDR75 - 3/4" SLOT U SDR100 - 1" SDR100

PROJECT: SDS / SDR **ENGINEER:** TYPE 8, 8A **CUSTOMER:** SURFACE MOUNTED 250099 LINEAR DIFFUSER SPEC. SYMBOL: SUBMITTAL DATE: CONCEALED PLASTER FRAME 2013/08/30

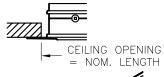
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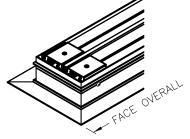


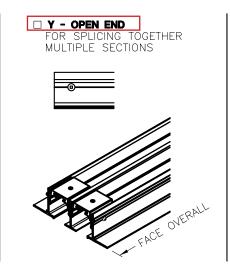
SDS / SDR LINEAR SLOT DIFFUSER - TYPE 8, 8A CONCEALED PLASTER FRAME APPLICATION

END CONDITIONS:

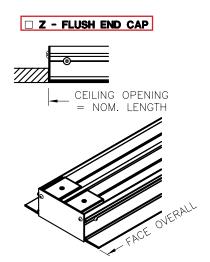






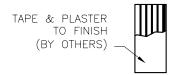


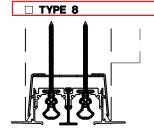
MOUNTING:



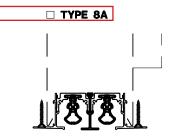
SCREWHEADS EXTEND 1/8" (3) BEYOND OPENING DIMENSION ON Z ENDS

END CONDITION	FACE OVERALL LENGTH
X-X	NOM. LENGTH + 11/4" (32)
X-Y	NOM. LENGTH + 5/8" (16)
Y-Y	NOM. LENGTH
Y-Z	NOM. LENGTH
Z-Z	NOM. LENGTH









COUNERSUNK SCREW HOLES FOR DRYWALL SCREWS (BY OTHERS)

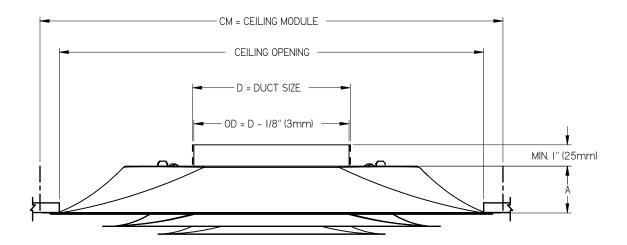
	W							
SLOTS	SDS50	SDS75	SDS100	SDS150				
1	2" (51)	2 ¹ / ₄ " (57)	2½" (64)	3" (76)				
2	3 ¹ /4" (83)	3 ³ / ₄ " (95)	4 ¹ / ₄ " (108)	5½" (133)				
3	41/2" (114)	51/4" (133)	6" (152)	7½" (191)				
4	5 ³ /4" (146)	6 ³ /4" (171)	7 ³ / ₄ " (197)	9 ³ / ₄ " (248)				
5	7" (178)	81/4" (210)	9½" (241)	12" (305)				
6	8 ¹ /4" (210)	9 ³ /4" (248)	11 ¹ / ₄ " (286)	14 ¹ / ₄ " (362)				
7	9½" (241)	11 ¹ / ₄ " (286)	13" (330)	16½" (419)				
8	10 ³ /4" (273)	12 ³ ⁄ ₄ " (324)	14 ³ / ₄ " (375)	18 ³ ⁄4" (476)				
9	12" (305)	14 ¹ / ₄ " (362)	16½" (419)	21" (533)				
10	13 ¹ /4" (337)	15 ³ /4" (400)	18 ¹ /4" (464)	231/4" (591)				

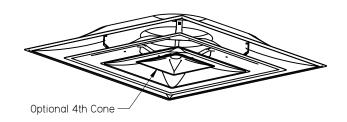
ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.

PROJECT:		Jrice*	
ENGINEER:		<u> </u>	SDS / SDR TYPE 8, 8A
CUSTOMER:		250099	SURFACE MOUNTED LINEAR DIFFUSER
SUBMITTAL DATE:	SPEC. SYMBOL:	2013/08/30	CONCEALED PLASTER FRAME



SCD, ASCD Square Cone Diffuser





STANDARDCONSTRUCTION:

- ☐ SCD Steel construction
- ☐ ASCD Aluminum construction

DAMPERS:

- □ VCR7 Radial opposed blade steel damper (N/A with 4", 5", or 7" inlets)
- (N/A with 4", 5", or /" inlets)

 ☐ VCR8 Full Flow duct mounted steel damper
- □ VCR8E Full Flow diffuser mounted steel damper
- □ VCR9 Radial diffuser mounted steel damper (N/A with 4", 5", 7", or 15" inlets)

SB - SECTORIZING BAFFLE:

Steel construction -

- ☐ 90 3 Way pattern
- ☐ 180 2 Way pattern
- ☐ 270 1 Way pattern
- (N/A if a damper is selected)

FINISH:

☐ B12 White

(Optional Finishes Available)

OPTIONS:

- ☐ R6 Insulated Backpan (style 31 or 4TS, N/A with 20"x20" or 500mm x 500mm)
- ☐ AFI 1/2" fiberglass with foil/scrim vapor barrier insulated backpan (style 31, 20"x20" or 500mm x 500mm only)
- ☐ BN Beaded Inlet Neck with extended depth (2 1/2" (64mm)). Not available on ASCD
- ☐ FC Fixed core is available only for 24"x24" & 600mm x 600mm styles 17 & 31. For surface mount installation use of plaster frame is recommentded.
- ☐ RC Removable core is available for all sizes and styles
- ☐ 4C 4th cone (24"x24" and 600mm x 600mm units only)
- ☐ MRI aluminun construction. Available for ASCD 24"x24" & 600mm x 600mm, styles 31 & 17 only. Not available with 4th cone, dampers, or sectorizing baffle options.

Ceiling Module	Coiling Opening	Α	Duct Size								
Celling Module	Ceiling Opening		4"	5"	6	7"	8"	10"	12"	14"	15"
12" x 12"	10 1/2" x 10 1/2"	1 1/8"	•	•	•	•	•				
20" x 20"	18" x 18"	2 1/2"			•		•	•			
24" x 24"	22" x 22"	2 1/2"			•		•	•	•	•	•
300mm x 300mm	249mm x 249mm	29mm	•	•	•	•	•				
500mm x 500mm	449mm x 449mm	64mm			•		•	•			
600mm x 600mm	549mm x 549mm	64mm			•		•	•	•	•	•

indicates available inlet size

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PROJECT:

ENGINEER:

CUSTOMER:

218772

SPEC. SYMBOL:

SCD / ASCD SQUARE CONE DIFFUSER

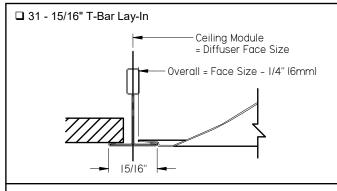
2018-08-24

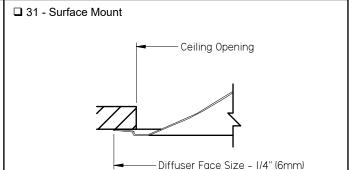
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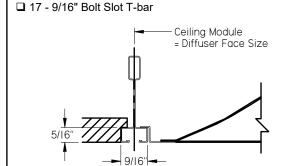


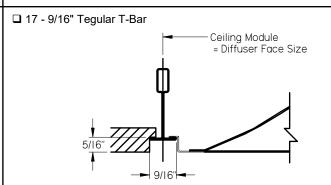
SCD, ASCD Square Cone Diffuser

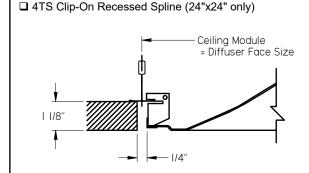
Lay-in & Surface Mount Frames:

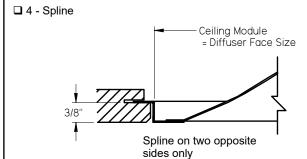


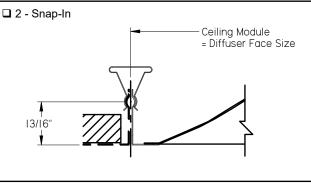












NOTES:

- For 9/16" flat tee installation use style 31 with adaptor clips from ceiling supplier, or order 916 corner clip separately.
- 20" x 20" & 500mm x 500mm available in style 31 only
- ASCD available with style 31 and 17 only
- Dampers and sectorizing baffles ship loose
- Factory tolerance ± 1/32" (1mm)

ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.

PROJECT:

ENGINEER:

CUSTOMER:

SUBMITTAL DATE:

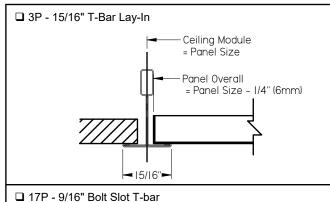
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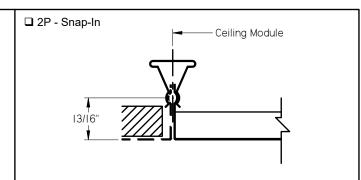
2018-08-24



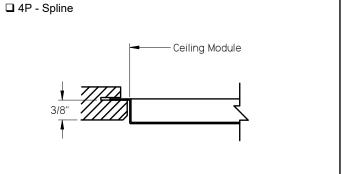
SCD, ASCD Square Cone Diffuser

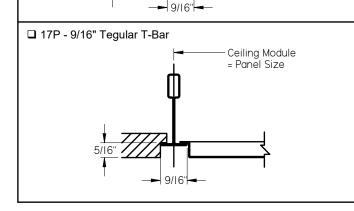
Lay-in Panels: Available in SCD only





Ceiling Module = Panel Size





PANEL SIZE:

- 12" x 12" face size: ☐ 24" x 12" panel ☐ 16" x 16" panel
- ☐ 16" x 16" panel ☐ 20" x 20" panel ☐ 24" x 24" panel
- 24" x 24" face size: ☐ 30" x 30" panel ☐ 48" x 24" panel
- ☐ 24" x 24" panel
- 300mm x 300mm face size:

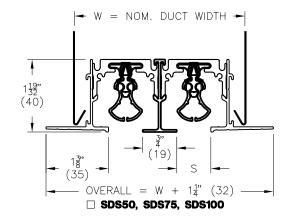
 ☐ 600mm x 300mm panel
 ☐ 400mm x 400mm panel
 ☐ 500mm x 500mm panel
 - 400mm x 400mm panel 500mm x 500mm panel 600mm x 600mm panel 1200mm x 300mm panel
- 600mm x 600mm face size:

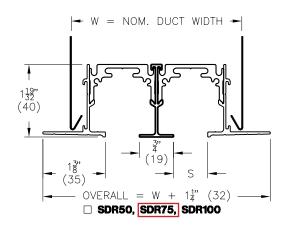
 ☐ 750mm x 750mm panel
 - ☐ 750mm x 750mm panel ☐ 1200mm x 600mm panel

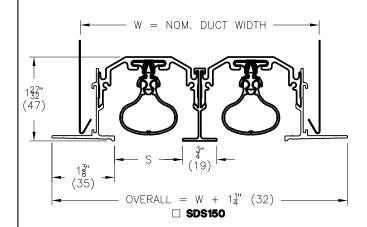
ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER

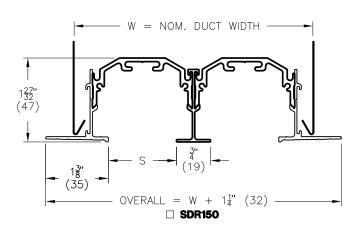


SDS / SDR LINEAR SLOT DIFFUSER - TYPE 8, 8A CONCEALED PLASTER FRAME APPLICATION









- PATTERN CONTROLLERS B17 BLACK
- OUTER FRAMES MILL FINISH

 □ CENTER TEE B12 WHITE (OPTIONAL FINISHES AVAILABLE)

MATERIAL:

- EXTRUDED ALUMINUM FRAME
- EXTRUDED ALUMINUM PATTERN CONTROLLERS ON MODELS SDS50, SDS150
- ROLLFORMED STEEL OR EXTRUDED ALUMINUM PATTERN CONTROLLERS ON SDS75, SDS100

NOTE:

- MINIMUM LENGTH 8" (203)
- MAXIMUM SECTION LENGTH 72" (1829)
- UNITS 6 SLOT AND LARGER SUPPLIED WITH 1" (25) REINFORCING ANGLES ATTACHED TO DIFFUSER
- 180° AIR PATTERN ADJUSTMENT AVAILABLE
- TAPING AND PLASTER FINISHING BY OTHERS
- SEE INSTALLATION INSTRUCTION 1100044
- USE WITH TYPE 2 SDB / SDA PLENUM, OR UP / UPL FACTORY TOLERANCE \pm $^{1}/_{32}$ " (1)

SUPPLY DIFFUSERS: **RETURNS:** SUPPLY DIFFUSIONS.

SDS50 - ½" SLOT

SDS75 - ¾" SLOT

SDS100 - 1" SLOT

SDS100 - 1" SLOT □ SDR50 - 1/2" SLOT

U SUSSU - 1/2 SLUT U SURSU - 1/2 SLUT U SURSU - 1/2 SLUT U SDR75 - 3/4" SLOT U SDR75 - 3/4" SLOT U SDR75 - 3/4" SLOT U SDR100 - 1" SDR100

PROJECT: SDS / SDR **ENGINEER:** TYPE 8, 8A **CUSTOMER:** SURFACE MOUNTED 250099 LINEAR DIFFUSER SPEC. SYMBOL: SUBMITTAL DATE: CONCEALED PLASTER FRAME 2013/08/30

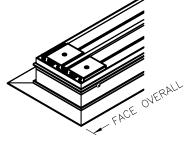


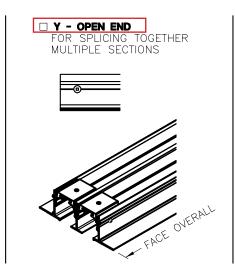
SDS / SDR LINEAR SLOT DIFFUSER - TYPE 8, 8A CONCEALED PLASTER FRAME APPLICATION

END CONDITIONS:

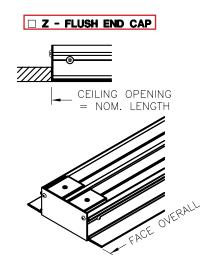






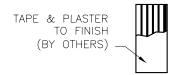


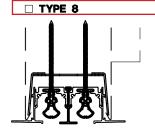
MOUNTING:



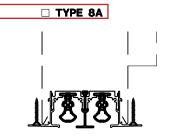
SCREWHEADS EXTEND 1/8" (3) BEYOND OPENING DIMENSION ON Z ENDS

END CONDITION	FACE OVERALL LENGTH				
X-X	NOM. LENGTH + $1\frac{1}{4}$ " (32)				
X-Y	NOM. LENGTH + 5/8" (16)				
Y-Y	NOM. LENGTH				
Y-Z	NOM. LENGTH				
Z-Z	NOM. LENGTH				









COUNERSUNK SCREW HOLES FOR DRYWALL SCREWS (BY OTHERS)

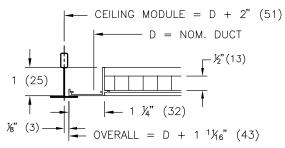
	W							
SLOTS	SDS50	SDS75	SDS100	SDS150				
1	2" (51)	2 ¹ / ₄ " (57)	2½" (64)	3" (76)				
2	31/4" (83)	3 ³ ⁄ ₄ " (95)	4 ¹ / ₄ " (108)	5½" (133)				
3	4 ¹ /2" (114)	51/4" (133)	6" (152)	71/2" (191)				
4	5 ³ / ₄ " (146)	6 ³ / ₄ " (171)	7 ³ / ₄ " (197)	9 ³ / ₄ " (248)				
5	7" (178)	8½" (210)	9½" (241)	12" (305)				
6	8 ¹ /4" (210)	9 ³ ⁄ ₄ " (248)	11 ¹ / ₄ " (286)	14 ¹ / ₄ " (362)				
7	9½" (241)	11 ¹ / ₄ " (286)	13" (330)	16½" (419)				
8	10 ³ / ₄ " (273)	12 ³ / ₄ " (324)	14 ³ ⁄ ₄ " (375)	18 ³ ⁄ ₄ " (476)				
9	12" (305)	14 ¹ / ₄ " (362)	16½" (419)	21" (533)				
10	13 ¹ /4" (337)	15 ³ /4" (400)	18 ¹ /4" (464)	23 ¹ / ₄ " (591)				

ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.

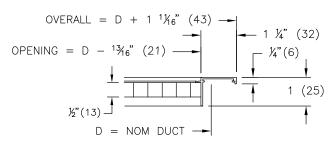
		arice®	
ENGINEER:		M 9	SDS / SDR TYPE 8, 8A
CUSTOMER:		250099	SURFACE MOUNTED LINEAR DIFFUSER
SUBMITTAL DATE:	SPEC. SYMBOL:	2013/08/30	CONCEALED PLASTER FRAME



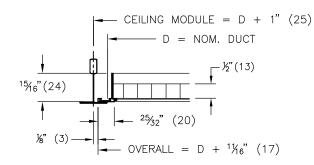
80 RETURN GRILLES & REGISTERS



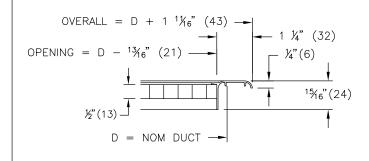
□ F - FLAT FACE BORDER (T-BAR LAYIN)



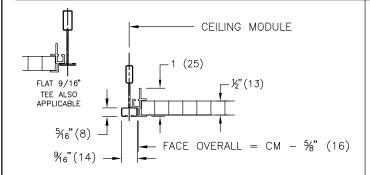
□ F - FLAT FACE BORDER (SURFACE MOUNT)



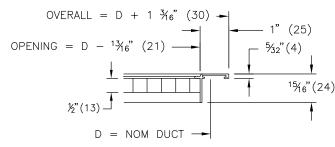
□ NF - NARROW FACE BORDER (T-BAR LAYIN)



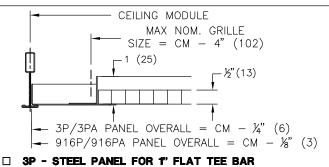
□ C - CURVED FACE BORDER (SURFACE MOUNT)



☐ 17 - 9/16" BOLT SLOT OR FLAT TEE BAR



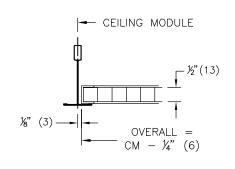
□ N - NARROW FLAT FACE BORDER (SURFACE MOUNT)

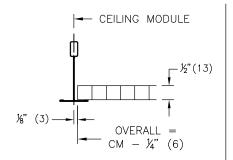


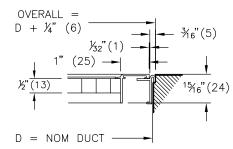
- 3PA ALUMINUM PANEL FOR 1" FLAT TEE BAR 916P STEEL PANEL FOR 9/16" FLAT TEE BAR 916PA - ALUMINUM PANEL FOR 9/16" FLAT TEE BAR
- CEILING MODULE MAX NOM. GRILLE SIZE = CM - 4" (102)FLAT 9/16" ½"(13) TEE ALSO APPLICABLE 5/₆"(8) PANEL OVERALL = $CM - \frac{5}{8}$ " (16) %₆"(14)
- 17P STEEL PANEL, 9/16" FINELINE OR FLAT TEE BAR □ 17PA - ALUMINUM PANEL, 9/16" FINELINE OR FLAT TEE BAR ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER

PROJECT: **80 SERIES ENGINEER:** ALUMINUM RETURN **CUSTOMER:** GRILLES & REGISTERS SPEC. SYMBOL: SUBMITTAL DATE: 2015/12/03







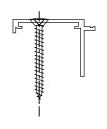


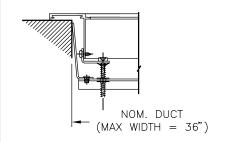
☐ CH - CHANNEL BORDER (T-BAR LAYIN) ☐ CORE - CORE ONLY (T-BAR LAYIN)

ED APPLICATION IS SUPPLIED COMPLETE WITH BORDER AND DUCT MOUNTING FRAME REQUIRES SELECTION OF TYPE "I" OR TYPE "C" MOUNTING

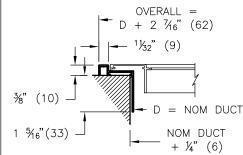
□ ED - EXPOSED DUCT BORDER

FASTENING





MOUNTING FRAME



A - COUNTER SUNK SCREW H - STRAIGHT SCREW HOLES (ED FRAME ONLY)

7 ¼" (184)

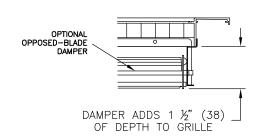
MAX.

1 ¼"(32) —-

□ C - CONCEALED MOUNTING BRACKET NOT AVAILABLE FOR MRI APPLICATIONS

□ D (FOR F FRAME ONLY) NOT AVAILABLE FOR MRI APPLICATIONS

OPPOSED BLADE DAMPER



VCS3 - COATED STEEL OPPOSED BLADE DAMPER VCS3AL - ALUMINUM OPPOSED BLADE DAMPER

THIN LINE RETURN DISSIPATER

- 21 ¾" (552) -

000000000

- 21 ¾₆" (538)

OVERALL = $23 \frac{1}{6}$ (602)

□ TLRD OPTION (NOM. SIZE 22" X 22" AND F FRAME ONLY)

000000

TIRD

80 RETURN GRILLE

(F FRAME T-BAR LAY-IN ONLY)

FINISH:

B12 WHITE (OPTIONAL FINISHES AVAILABLE)

MATERIAL:

- GRILLE ALUMINUM CONSTRUCTION
- PANEL STEEL CONSTRUCTION (3P, 916P & 17P)
 - ALUMINUM CONSTRUCTION (3PA, 916PA & 17PA)

NOTES:

• AVAILABLE SIZES:

MINIMUM - 6" X 4" (152 X 102)MAXIMUM WITHOUT MULLION - 48" X 24" (1219 X 610) MAXIMUM WITH MULLION - 96" X 48" (2438 X 1219)

- · UNITS WITH MULLION SUPPLIED IN ONE-PIECE FRAME CONSTRUCTION
- UNITS OVER 96" X 48" (2438 X 1219) SUPPLIED IN SECTIONS c/w DUCT MOUNTING CHANNEL
- CH (CHANNEL FRAME) UNITS OVER 48" x 24" (1219 x 610) SUPPLIED IN MULTIPLE SECTIONS
- CORE ONLY & 17 FRAME MAX 48" \times 24" (1219 X 610) • FACTORY TOLERANCE \pm 1/32" (1)

PANEL SIZES:

• MODULE SIZE AND NOM. GRILLE SIZE MUST BE SPECIFIED

NOMINAL MODULE SIZES	MAXIMUM GRILLE SIZES
12" x 12" - 300mm x 300mm	8" x 8"
24" x 12" - 600mm x 300mm	20" x 8"
24" x 24" - 600mm x 600mm	20" x 20"
48" x 24" - 1200mm x 600mm	44" x 20"

OPTIONAL:

• MRI - ALUMINUM CONSTRUCTION FOR MRI APPLICATIONS. F, 17, CH, CORE FRAMES ONLY. NOT AVAILABLE W/ DAMPER. MAXIMUM SIZE = 24" X 24" (610 X 610)

NOT AVAILABLE FOR MRI APPLICATIONS ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER PROJECT: 80 SERIES **ENGINEER:** ALUMINUM RETURN **CUSTOMER:** GRILLES & REGISTERS SUBMITTAL DATE: SPEC. SYMBOL: 2015/12/03

BURKE MOUNTAIN DISCOVERY CENTRE + COFFEE HOUSE LIGHTING SPECIFICATIONS

ISSUED FOR COFFEE HOUSE RFP: 2020-10-02

GENERAL NOTES:

- 1. To be read in conjunction with architectural, electrical, structural drawings and specifications
- 2. Provide current, up-to-date product specfications as submittals for review by owner / consultant
- 3. Report products with long lead times or unavailable to the attention of the owner / consultant



EXTERIOR POT LIGHT

ALPHABET

Alphabet by Ledra Brands, Inc.

15774 Gateway Circle Tustin, CA 92780

PH: 714.259.9959 FAX: 714.259.9969

AlphabetLighting.com

JOB NAME

ORDERING CODE

CONTACT

2 NU4"

Square Adjustable

COB









DESCRIPTION

The EcoNUHAOA is an economical and highly efficient spec grade 4" recessed adjustable with thoughtful construction and pleasing aesthetics. Standard with premium dimming using EldoLED 1% flicker free drivers in 120V, 277V, and step down transformer for 347V. An adjustable hot-aiming system allows tilt adjustments from 0° to 40° with 360° rotation. The aiming adjustment and locking mechanisms are accessible from below the ceiling while the reflector is installed. A complex tilting mechanism positions the tilting axis for the maximum optical performance at all angles.

For the trim version, a minimalistic look is achieved with an ultrathin 1/16" trim that is only 5/16" wide. Color choices of both trim and bezel are offered for a customized look. For the trimless version, a perforated, mud up, regressed trim assembly provides for clean, trim free installation. Perforated mud frame's integrated lip helps guide the joint compound creating a sharp and clean opening.

HOUSING

Electrocoated 16-gauge cold-rolled steel provides enhanced structural reinforcement and rust prevention. Superior UL-certified, injection-molded commercial-grade LexanTM (PC) is used for the frame and regressed bezel trim. Lexan provides unmatched durability and impact resistance, and is tested for UV resistance and water exposure in outdoor applications. The thermally-advanced, anodized heat sink uses 6063 aluminum alloy. A 90-minute constant-power IOTA emergency battery backup is available.

MOUNTING

MOUNTING
An advanced mounting system allows for quick and secure installation with LED and driver serviceability from below the ceiling. The LED assembly uses die-cast aluminum mounting clamp grips (MCG) that swing out to tighten onto variable ceiling thicknesses. Integrated rubber feet on each MCG provide a non-slip vibration-resistant installation. The hidden MCG system is accessible from below ceiling by removing the snap-in lensbezel assembly with either the included suction cup or a screwdriver blade. Integrated bar hangers feature integral toothed nails, T-bar mounting slots with locking holes, tabs for joist positioning. Retrofit mounting option allows for installation from below ceiling by use of compact driver box. No risk damaging LED or bezel assembly during installation, these are installed during last steps. Fixture and driver are easily removed for servicing after install without damaging drywall.

MOUNTING DIMENSIONS	CEILING THICKNESS	CEILING CUTOUT
Trim	1/8" to 1-1/4"	4-1/4" square
Trimless	3/8" to 1-3/4"	4-1/2" square

New Construction	Mounting Length:
Bar Hangers (included)	14-3/4" to 26"
Extension Kit p/n: K20266	Extends a pair of Bar Hangers
(ordered separately,	Total Mounting Length:
1 per fixture)	29" to 48"

LISTINGS

- ETLus Listed to UL1598, cETL Listed to CSA C22.2 #250.0
- IP65 with lens Suitable for wet locations with lens Suitable for damp locations without lens
- Non-conductive, Lexan dead-front construction
 Made in the USA meets the requirements of the Buy American provision within the ARRA

RATINGS / CERTIFICATIONS	NC	RET	IC	ICAT	CP
Type non-IC	/	1			
Type IC			1	1	1
Chicago Plenum (CCEA)					1
Suitable for air handling plenums				1	1
Reduced airflow (with lens) ASTM E283	1	1	1	1	1

LED INFO

- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L₇₀ > 49,500 hrs - 80 CRI: SDCM = 3-step MacAdam Ellipse, Lumen Maintenance: L₇₀ > 49,500 hrs

ORDERING CODE





27K 2700K						
SW static white						
Square adjustable trimless SW Static white		square adjustable				
O7LM						
O7LM 570 lm Calculated Delivered Lumens = Delivered Lumens Multiplier x [Refi						
DELIVERED LUMENS 20 lm Delivered Lumen Value) x [CCT Multiplier] x [Refl 20 LM 1060 lm 20 LM 1540 lm 27 LM 22 10 lm 22 LM 22 10 lm 22 LM 27 LM 2						
Second S						
COUMENS 20LM 1640 lm						
(3000K 80CRI S35) 22LM 1040 III 27LM 2210 Im 22K 2200K CCT 2200K 3000K 3500K 27K 2700K						
22K 2200K CCT 2200K 2700K 3000K 3500K 27K 2700K						
27K 2700K	22 10 IIII					
	2200K CCT 2200K 2700K 3000K 3500K 4000K 50					
	\neg	$\overline{}$				
CCT 3000K	90+	80+ 90+				
35K 3500K	.03 0.87	1.04 N/A				
50K 5000K LUMEN OUTPUT 0.55 (A.M.	.03 0.07	1.04 167				
	80CRI					
90 ¹ 90CRI						
\$35 35° specular, no lens (1.00)						
D50 50° diffused, no lens (0.93)						
D60 60° diffused, no lens (0.90)						
SC35 35° specular with clear lens (0.99)						
REFLECTOR DC50 50° diffused with clear lens (0.92)						
& LM MULTIPLIER DC60 60° diffused with clear lens (0.89)						
HE60 60 high efficiency diffused iens (0.93)						
HE70 70° high efficiency diffused lens (0.90) HEQ50 50° high efficiency square diffused lens (0.90)						
HEQ50 50° high efficiency square diffused lens (0.90) HEQ60 60° high efficiency square diffused lens (0.91)						
3						
	120V					
277 277V						
See Electrical Options for 347V.						
DIM10 ³ standard driver with flicker free 0-10V dimming to 1%						
DIM10Z ³ flicker free 0-10V dimming to 0%						
DALI ³ flicker free DALI dimming to 1%						
DALIZ ³ flicker free DALI dimming to 0%						
DMXZ flicker free DMX dimming to 0% LTE Lutron Hi-lume 2-Wire (Triac) dimming to 1%						
DIMMING LIE Lutron Hi-lume EcoSystem dimming to 1%,						
Soft-on & Fade-to-Black						
Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELU* leading & trailing edge (Triac/ELV) dimming to <10%						
LUTP ⁶ Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELU* leading & trailing edge (Triac/ELV) dimming to <10%						
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LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV¹ leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading edge (Triac/EL						
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LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV¹ leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading edge (Triac/EL						
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LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% MOUNTING OPTIONS NC new construction with ceiling fitting plate ICAT insulation contact housing ICAT insulation contact housing Cp2 chicago plenum housing RET retrofit, no ceiling fitting plate WH white WH white MC matte chrome						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV* leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% leading & trailing edge (Triac/ELV) dimming to <10% constant edge (Triac/ELV) di						
LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% NC new construction with ceiling fitting plate IC2 insulation contact housing IC3 insulation contact housing CP2 chicago plenum housing RET retrofit, no ceiling fitting plate WH white MC matte chrome BK black BZ bronze						
LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% NC new construction with ceiling fitting plate IC2 insulation contact housing IC3 insulation contact / airtight housing CP2 chicago plenum housing RET retrofit, no ceiling fitting plate WH white MC matte chrome BK black BZ bronze WT wheat						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 1% NC new construction with ceiling fitting plate IC2 insulation contact housing ICAT2 insulation contact / airtight housing cp2 chicago plenum housing RET retrofit, no ceiling fitting plate TRIM COLOR? WH white MC matte chrome BK black BZ bronze WT wheat WH white						
LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% ELV4 leading & trailing edge (Triac/ELV) dimming to 10% IC2 leading & trailing edge (Triac/ELV) dimming to 1% IC3 insulation contact housing ICAT2 cp2 insulation contact housing CAT2 cp2 chicago plenum housing RET retrofit, no ceiling fitting plate ICAT3 cp2 chicago plenum housing RET retrofit, no ceiling fitting plate ICAT4 cp2 insulation contact / airtight housing COLOR7 cp2 chicago plenum housing RET retrofit, no ceiling fitting plate ICAT4 cp2 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT5 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT6 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT6 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling fitting plate ICAT7 cp3 insulation contact / airtight housing RET retrofit, no ceiling f						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black LEV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming t						
LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 11% leading edge (Triac/ELV) dimming to 11% leading edge (Triac/ELV) dimming to <10% leading edge (Triac/ELV) dimming to						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black LEV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming t						
LUTP* Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 1% MOUNTING OPTIONS NC new construction with ceiling fitting plate IC2 insulation contact housing ICAT2 insulation contact / airtight housing Cp2 chicago plenum housing RET retrofit, no ceiling fitting plate WH white MC matte chrome BK black BZ bronze WT wheat WH white BEZEL COLOR BK black BZ bronze WT wheat WH white BEZEL COLOR BK black BZ bronze WT wheat EM76 emergency battery backup, 90 minutes at 7 watts to Life EM76 emergency backup, 90 minutes at 7 watts to Life EM776 emergency backup, 90 minutes at 7 watts to Life						
LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to 11% leading edge (Triac/ELV) dimming						
LUTPs Lutron Hi-lume Premier EcoSystem dimming to 0.1%, Soft-on & Fade-to-Black ELV4 leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (Triac/ELV) dimming to 10% leading & trailing edge (Triac/ELV) dimming to <10% leading & trailing edge (T						

NU4-QAT-SW-27LM-30K-90-S35-120-DIM10-NC-WH-WH

Follow the steps to specify your fixture, example

NU4 - QA - SW - 13LM - 35K - 90 - D50 - 120 - DIM10 - NC - WH - WH - EM7

SW (LED)	POWER
DELIVERED LM	W (80/90 CRI)
570	7
820	9
1060	12
1640	16
2210	22

Power Factor ≥ 0.9

- 1 90 CRI not available in 2200K or 5000K.
 1 C/ICAT/CP not available in 20LM or 27LM.
 3 Driver uses loganthmic dimming curve as standard. For linear dimming curve add "LIN" after dimming code, i.e. DIM10LIN.
 4 Trias/ELV dimming available in 120V only.
 5 For integrated test switch add "ITS" after emergency backup code, i.e. EM12ITS. Test switch is mounted in the bezel of the finders.
 4 UT Prin of available in 120V only.
 5 UT Prin of available in 120V o

- For trimless option eliminate "Trim Color Code" from catalog string. Example: NU4 QAT SW 13LM 35K 90 D50 120 DIM10 NC WH EM



EXTERIOR POT LIGHT



Alphabet by Ledra Brands, Inc.

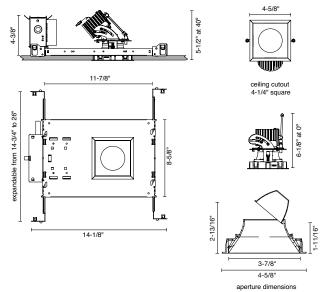
15774 Gateway Circle Tustin, CA 92780

PH: 714.259.9959 FAX: 714.259.9969

AlphabetLighting.com

MOUNTING OPTIONS

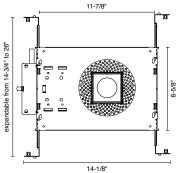
NC - NEW CONSTRUCTION TRIM



NC - NEW CONSTRUCTION

TRIMLESS

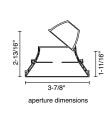






ceiling cutout 4-1/2" square







1. Fasten mud frame to ceiling.



3. Install LED assembly.



Insert protective cover (included).

Apply joint compound over the mud frame.



4. Install bezel.





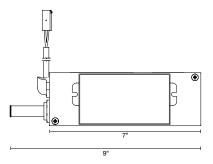
Alphabet by Ledra Brands, Inc.

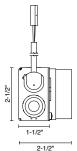
15774 Gateway Circle PH: 714.259.9959 Tustin, CA 92780 PAX: 714.259.9969

AlphabetLighting.com

MOUNTING OPTIONS (CONTINUED)

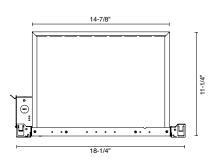
RET - RETROFIT TRIM/TRIMLESS

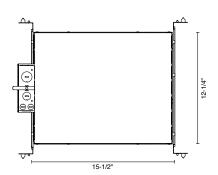




IC1 - INSULATION CONTACT HOUSING

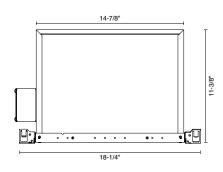
TRIM/TRIMLESS

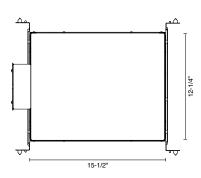




CP - CHICAGO PLENUM ICAT - INSULATION CONTACT / AIR TIGHT

TRIM/TRIMLESS





NOTES
1 Consult factory for smaller IC Housings when selecting lower lumen packages.





Alphabet by Ledra Brands, Inc.

15774 Gateway Circle Tustin, CA 92780 PH: 714.259.9959 FAX: 714.259.9969

AlphabetLighting.com

SQUARE LENS OPTION

 HEQ50
 50° high efficiency square diffused lens

 HEQ60
 60° high efficiency square diffused lens

 HEQ70
 70° high efficiency square diffused lens



TRIM VERSION WITH SQUARE LENS



TRIMLESS VERSION WITH SQUARE LENS



EXTERIOR WALL MOUNTED LED

KEENE

by (Signify

Wall mount

LytePro

LPW7 small wall sconce



Keene LytePro LED small wall sconce LPW7 features outstanding value in a compact, architectural design, and combines energy savings with good photometric performance. LPW7 is ideal for entryways, corridors, facade and other wall/surface lighting applications.

Project:	
Location:	
Cat.No:	
Type:	
Lamps:	Qty:
Notes:	

Ordering guide

Example: LPW7-10-NW-G3-2-120-PCB-BZ

					Options	
Prefix	Wattage	LED Color/Gen	Distribution	Voltage	Photocontrol	Finish
LPW7	10	WW-G3	2	UNV	PCB	BK
LPW7 LytePro 7 LED small wall sconce	10 10W	NW-G3 Neutral White 4000K 70 CRI Generation 3 WW-G3 Warm White 3000K 70 CRI Generation 3	2 Type 2	120 120V 208 208V 240 240V 277 277V UNV 120-277V (50/60Hz)	PCB Photocontrol Button ¹	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)

Stocked luminaires - Ordering guide

Catalog Number	Description	Master Pack, Qty	UPC Code
LPW7-G3-8-BZ	LPW7, 250mA, 4000K, 120-277V, Bronze textured paint	6	622252813858
LPW7-G3-8-DGY	LPW7, 250mA, 4000K, 120-277V, Dark gray textured paint	6	622252813841

Stocked accessories - Ordering guide (Must be ordered separately)

Catalog Number	Description	Master Pack, Qty	UPC Code
LPWCVRPLT-BZ ²	LPW Universal wall cover mounting plate, Bronze textured paint	(none)	190096144860

¹ Must specify voltage.



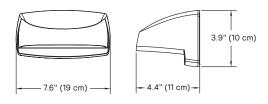
² Other colors available upon request as made-to-order

EXTERIOR WALL MOUNTED LED

LPW7 LytePro

LED small wall sconce

Dimensions

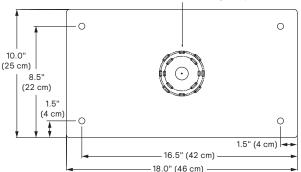


Luminaire weight: 4 lbs (1.8 kg)

Accessory dimensions (ordered separately)

LPWCVRPLT LPW Universal wall cover mounting plate, 0.08" aluminum, bronze textured paint (used to cover larger pre-existing opening or surfaces, field installed). Offers same J-Box pattern as luminaire or may lagged to wall using (4) knockouts.

Universal J-Box mounting hole pattern



LED Wattage and Lumen Values

		LED		Average	Type 2		
Ordering Code	Total LEDs	Total Current	Color Temp.	System Watts	Lumen Output	BUG Rating	Efficacy (LPW)
LPW-7-10-NW-G3-2	18	250	4000	9.7	1050	B1-U0-G0	108
LPW-7-10-WW-G3-2	18	250	3000	9.7	1051	B1-U0-G0	108

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown.

Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

 $NOTE: Some\ data\ may\ be\ scaled\ based\ on\ tests\ of\ similar\ (but\ not\ identical)\ luminaires.\ Contact\ factory\ for\ configurations\ not\ shown.$

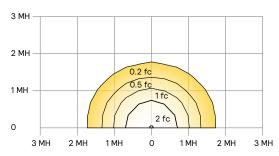
Predicted lumen depreciation data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology Actual experience may vary due to field application conditions. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

Ambient Temperature °C	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
up to 40°C	>200,000 hours	>60,000 hours	>92%

Optical distribution

Based on LPW7-10-NW-G3-2 at 10' mounting height



LPW7 10' mounting height						
Mounting height	6 ft	8 ft	10 ft			
Multiplier	1.23	1.14	1.00			



EXTERIOR WALL MOUNTED LED

LPW7 LytePro

LED small wall sconce

General Description

LytePro LED small wall sconce LPW7 combines excellent performance, design and value to meet the needs of the energy and budget conscious. The LPW7 is available for use in downward facing, surface wall mount applications, over recessed j-boxes or where power can be directly fed through back surface, whereby connections splices can be made inside the luminaire housing. Two SKU's are available as in-stock configurations (2-day quick ship).

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates an integrated heat sink to maximize thermal performance and reliability. Backplate is corrosion free, composite polycarbonate, with built-in level bubble, offers integral interlocking hook and mount design for easy installation.

Mounting

Easy interlocking hook and mount housing/backplate design for easy installation. Mounts over 3.5", 4" octagonal j-boxes and single gang switch boxes (mounted horizontally) or can be directly lagged to surface. Ensure proper steps for gasket/sealing luminaire to surface.

IP Rating

Optical compartment is IP65 rated.

LED Board and Array

Provides up to 108 lm/W at the system level. Standard color temp is 4000K or 3000K +/- 130K, minimum 70 CRI.

Electrical

Driver efficiency (>89% standard). 120-277V. Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. RoHS compliant.

Listings

Product is cETLus listed suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). DesignLights Consortium® qualified.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish.

Warranty

LPW7 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See www.signify.com/warranties for details.



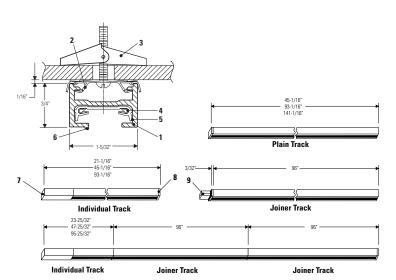
LIGHTOLIER

Track Lighting

Lytespan

6000 Basic 1 Circuit Track

by (s) ignify



6000NWH	6003NAL	6049NWH	6054NBK	26082
6000NBK	6004NWH	6049NBK	6060NWH	6087
6000NAL	6004NBK	6050NWH	6060NBK	6088
6001NWH	6004NAL	6050NBK	6061NWH	6089
6001NBK	6008NWH	6051NWH	6061NBK	7480
6001NAL	6008NBK	6051NBK	6062WH	7480AL
6002NWH	6008NAL	6052NWH	6062BK	7481
6002NBK	6046NWH	6052NBK	6062NAL	7582
6002NAL	6046NBK	6053NWH	6063WH	7582AL
6003NWH	6048NWH	6053NBK	6063BK	7584
6003NBK	6048NBK	6054NWH	6063NAL	7586

Project:

Type: Lamps:

Qty:

Finishes	Individual	Track		Joiner Track	Plain Track		
	Includes Live End Feed Connector		Includes Mini Coupler	Includes Dead End			
	2' Catalog No.	4' Catalog No.	8' Catalog No.	8' Catalog No.	4' Catalog No.	8' Catalog No.	12' Catalog No.
Matte White	6000NWH	6001NWH	6002NWH	6003NWH	6004NWH	6008NWH	6012NWH
Matte Black	6000NBK	6001NBK	6002NBK	6003NBK	6004NBK	6008NBK	6012NBK
Met Aluminum	6000NAL	6001NAL	6002NAL	6003NAL	6004NAL	6008NAL	6012NAL

Features

Basic Lytespan is a one circuit electrical distribution system designed to support and supply all Lytespan lighting units in a flexible manner. The track can be installed individually in straight runs or in a variety of patterns.

- 1. Basic Lytespan Track: 6063-T5 structural aluminum extrusion.
- Track Mounting Clips: 0.024 Spring steel, in black or white; order separately.
- 3. Toggle Bolt & Screws: furnished with track units.
- Conductor (2): copper 12 ga. equivalent. "U" shape provides reliable contact with connectors.
- 5. Insulating Liner: 0.032 " wall, high temperature thermoplastic.
- 6. Polarity Bead: identifies the neutral conductor.
- 7. Live End: molded thermoplastic. Contains contacts for power supply leads.
- 8. Dead End Cover: $\stackrel{\cdot}{\text{molded}}$ thermoplastic.
- 9. Mini Coupler: connects track units mechanically and electrically.

Mounting

The track may be surface or stem mounted (see pages 2, 3, and 4) or installed in a recessed housing (see Specification sheet 7515). The track is not intended to be cable mounted. All lengths can be field cut.

Finish

All painted finishes are baked enamel.

Electrical

Capacity is 20 amps. at 120 volts per branch circuit (2400 watts incandescent load). The track units are polarized and continuously grounded throughout. Electrical conductors are concealed in a insulating liner. Intended for wiring to branch circuit building wire with ground. All wiring must be in accordance with National and Local Codes.

Mechanical

Track units plug together and lock securely to prevent accidental separation. Lytespan lighting units can be attached at any point along the track.

Labels

cUL; I.B.E.W



6000 Surface Mounting kit

Basic 1 Circuit Track

Track Mounting and Power Feed Systems

Track Mounting Clips

Recommended: 2 clips per 2' & 4' track, 3 clips per 8' and 12' track units, order separately. Attaches to track at any point. Clip is nylon coated. Spaces track 1/16" from ceiling.

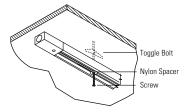
Not recommended for wall mounting.

56451WH Matte White **56451BK** Matte Black



Direct Mounting

Toggle bolts and nylon insulators are furnished with Track, two per 2' and 4' track, three per 8' and 12' track. Mount through existing holes in track. Top of track sits flush to mounting surface. Recommended for wall and ceiling mounting.

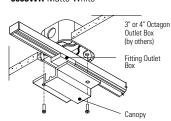


Saddle Canopy Kit

Mounts anywhere along track for power feed from a 4" or 3" octagon outlet box. Use Track Mounting Clips or direct mount track. Especially useful with Plain Track.

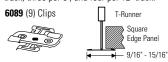
Max load 20 amps @ 120V, 60Hz.

6063WH Matte White

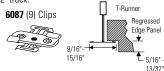


Grid Ceiling Mounting Clips

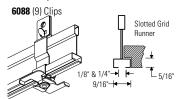
Square Edge Panels and 9/16"-15/16" T-Bars Clip is supplied assembled. Mounts onto T-Bars by rotating clips. Use two per 2' and 4' track, three per 8', and four per 12' track.



Regressed Edge Panels and 9/16"- 15/16" T-Bar Clip is supplied assembled. Mounts easily onto T-Bars by rotating clips. Use two per 2' and 4' track, three per 8', and four per 12' track.



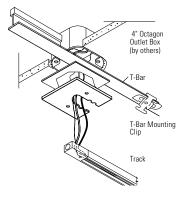
Slotted Grid Ceilings such as Donn Fineline and Chicago Metallic Ultraline 3500 and 3600. Use two per 2' and 4' track, three per 8', and four per 12' track.



Grid Ceiling Canopy Kit

Mounts to a 4" or 3" octagonal outlet box. Use two per 2' or 4' track, three per 8' and 12' track. When making a run of track do not exceed 4' between stems. Includes a special outlet box to fit onto runners. Power can be fed to Feed Track, Live End, "L", "T", "X", and In-Line connectors. Mounts along runner or at the intersection of runners.

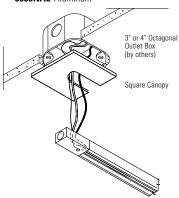
6096WH Matte White **6096BK** Matte Black



End Feed Canopy Kit

Mounts directly to Live End, 'L', 'T', X', In-Line and Variable Angle Connectors. Mounts to a 4" or 3" octagonal outlet box. For track installed with mounting clips or direct mounted. Canopy is 3/32" thick and 4-1/2" square.

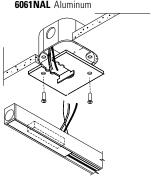
6060WH Matte White **6060BK** Matte Black **6060NAL** Aluminum



Floating Canopy Kit

Mounts to a 4" or 3" octagonal outlet box. Canopy is positioned anywhere along track, up to 4' from edge of track extrusion. Power can be fed to Live End, 'L', 'T', X', In-Line and Variable Angle Connectors. Mount track using track mounting clips. Canopy is 3/32" thick and 4-1/2" square.

6061WH Matte White 6061BK Matte Black 6061NAL Aluminum





6000 Surface Mounting kit

Basic 1 Circuit Track

Track Mounting and Power Feed Systems

Stem Mounting Kits

Mounts to a 4" or 3" octagon outlet box. Use two per 2' and 4' track, three per 8' and 12' track. When making a run of track do not exceed 4' between stems. Use additional stems for additional support. Power is fed to the track with the stem closest to the track feed-in point. For power feed to Feed Track and Live End, "L", "T", "X", In-line, and Variable Angle Connectors. Stem can be field cut.

Not recommended for wall mounting.

Stem mounts to track not feed connector.

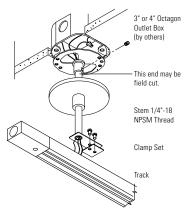
18" Stem 48" Stem

Actual length from

ceiling to top of track: 17 3/8" 47 3/8"

Matte White 7584

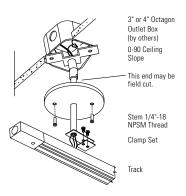
7586 7683 7681 Matte Black



Swivel Stem Mounting Kits

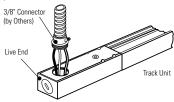
Adjusts from 0 to 90. Mounts to a 4" or 3" octagon outlet box. Use two per 2' and 4' track, three per 8' and 12' track. When making a run of track do not exceed 4' between stems. Use additional stems for additional support. Power is fed to the track with the stem closest to the track feed-in point. For power feed to Feed Track and Live End, "L", "T", "X", In-line, and Variable Angle Connectors. Can be field cut. 48" stem. Not recommended for wall mounting. Stem mounts to track not feed connector.

7480 Matte White 7481 Matte Black



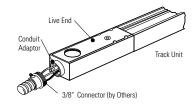
Direct Feed into Connectors

The Live End, "L", "T", "X", In-line, and Variable Angle Connectors contain a nut with a 1/2-14 thread to accept a 3/8" or 1/2" (trade size) electrical connector, 3/8" connector recommended. Does not require a separate power feed kit.



Conduit Adaptor

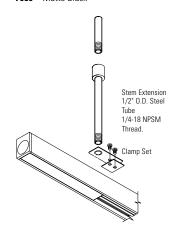
For feeding power to Live End from secure cable terminating in a 3/8" (trade size) electrical connector. Conduit must be self supporting. For use with 6048 and 6046. 7596 Zinc Plate



Stem Extension Kit

Mounts to any stem kit to extend its length by 48". Cannot be field cut.

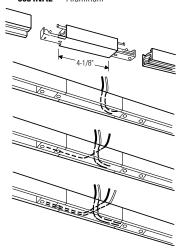
7582 Matte White 7680 Matte Black



In-Line Connector

Permits power feed between track units in a straight run of track. The In-Line Connector is polarized and pre-wired. KO permits direct feed with electrical connector

6054NWH Matte White 6054NBK Matte Black 6054NAL Aluminum

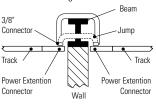


Power Extension Connector

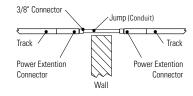
Replaces Dead End Cover at end of track to permit power continuity around structural obstacles to another track section. Accepts same power feed-in kits as Live End.

6046NWH Matte White 6046NBK Matte Black 6046NAL Aluminum

Over Beam or Through Beam



Through Wall or Column





6000 Surface Mounting kit

Basic 1 Circuit Track

Track Mounting, Power Feed Systems and Mounting Patterns

Variable Angle Connector

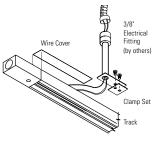
The Variable Angle Connector is pre-wired and polarized. It contains a die-cast zinc nut which accepts a standard 3/8" threaded conduit fitting. Flexes to any angle between 0-90.

6053WH Matte White 6053BK Matte Black 6053NAL Aluminum 7-1/4" Ceiling to Wall

Floating Invisible Feed

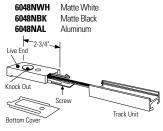
Can be mounted anywhere along the track at a maximum distance of 4' from edge of track extrusion. Accepts conduit or cable with 3/8" or 1/2" electrical connector (by others). Can be used with Live End, "L", "T", "X", and In-Line and Variable Angle connectors. Use Track Mounting Clips to mount the track.

26082 Zinc Plated



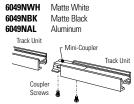
Live End

Energizes Track from the beginning of a run. KO permits direct feed with electrical connector. It is included with Individual Track Units. Use with plain track units.



Mini-Coupler

Used to connect two pieces of track together mechanically and electrically. Power cannot be fed to the Mini-Coupler. It is included with Joiner Track Units.



Cord and Plug

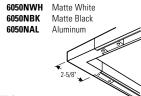
Energizes track from a polarized 120V receptacle. Especially useful with plain track. Supplied with a 15' two conductor 18 ga. cord and In-Line switch. The switch is supplied unattached. The track is not to exceed 1200 watts. The switch is rated for 6 amps, 720 watt with cord and plug attached.

6062WH Matte White 6062BK Matte Black



"L" Connector

The "L" connector is polarized and pre-wired. It may be rotated for right angle or left angle turn. KO permits direct feed with electrical connector



"T" Connector

The "T" connector is not pre-wired or polarized. Used to make "T" pattern with track. 12 ga. copper jumper wires supplied to make all necessary connections. KO permits direct feed with electrical connector.

6051NBK Matte Black 6051NAL Aluminum

6051NWH Matte White

"X" Connector

The "X" connector is not pre-wired or polarized. Used to make "X" pattern with track. 12 ga. copper jumper wires supplied to make all necessary connections. KO permits direct feed with electrical connector.

6052NWH Matte White

6052NBK Matte Black 6052NAL Aluminum

(s)ignify

RECESSED HOUSING

LIGHTOLIER

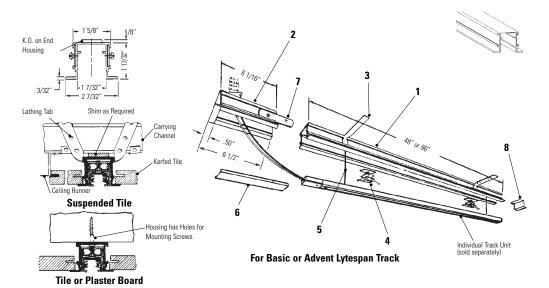
by (Signify

Track Lighting

Lytespan

7515 Recessed housing

Project:
Location:
Cat.No:
Type:
Lamps: Oty:



Patterns with Recessed Track

"L", "T", and "X" Housing/Splice Boxes are used to form patterns with recessed track. 7/8" dia. K.O.'s are provided on top for attaching circuit wiring for power feed. Auxiliary Electrical Connectors are required with "L", "T" and "X" Housing/Splice Boxes for power feed or power continuity through these Housing/Splice Boxes. Extra End Caps are provided with Housing/Splice Boxes.



Auxiliary Elect		
6464WH (Basic) 6467WH (Advent)	B	A.
Set of 2 for "L" Housing/Splice Box		
6462WH (Basic) 6465WH (Advent)	A COM	
Set of 4 for "T" or "X" Housing/Splice	Box	Č

NOTE: "L", "T" and "X" Connectors (See Specification Sheet 6000) are not used with recessed track.

		Multiple F	Power Feeds
Catalog No.	Description	End Housing/ Splice Box Housing	End Housing/ Housing
☐ 7515	4' Housing		
☐ 7516	8' Housing		
7517	End Housing/Splice Box	Individual Track	Individual Track



7515 Lytespan

Recessed housing

Features

- 1. Housing: extruded aluminum .062" wall, matte white. Will resist alkali in concrete for 48 hours while setting.
- 2. End Housing/Splice Box: extruded aluminum. 062" wall, matte white (2) 7/8" dia. K.O.'s provided for multiple feeds.
- 3. Lathing Tab: 20 ga. plated steel. Slides to desired position.
- 4. Mounting Clip: secures track to housing (includes allen wrench).
- 5. Hanger Chain
- 6. Splice Box Cover: 26 ga. steel, matte white. Snaps in without tools.
- 7. Spline
- 8. End Cap: (2) Supplied with End Housing/Splice Box.

Mechanical

Housings and Splice Boxes are locked securely together with metal Splines and Screw Fasteners.

Mounting

Lathing Tabs and holes in Recessed Housings are provided for mounting in a variety of ceilings. Recessed Housings may be installed in concrete.

Finish

Baked Enamel Paint, Matte White.

Labels

UL; I.B.E.W.

WE RESERVE THE RIGHT TO CHANGE DETAILS OF DESIGN, MATERIALS AND FINISH, IN ANY WAY THAT WILL NOT ALTER INSTALLED APPEARANCE OR REDUCE FUNCTION AND PERFORMANCE.

LIGHTOLIER a GENLYTE company 631 Airport Road, Fall River, MA 02720 (508) 679-8131 ◆ FAX (508) 674-4710

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LIGHTOLIER

by (Signify

Track Lighting

Track Head





Lightolier LED Track Head is the budget-friendly track lighting. This family has a simple and classic look and is available in 1100lm and 3000lm with different beam options.

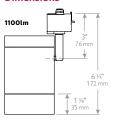
Project:	
Location:	
Cat.No:	
Type:	
Lamps:	Qty:
Notes:	

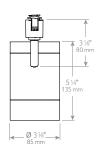
example: TH10930NF1W

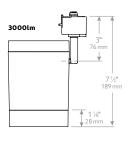
Fixture

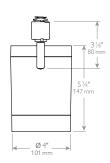
Series TH	Adapter _	Lumens 30	CRI 9	сст 30	Beam NF	Voltage 1	Finish W
TH Track head	LightolierJ Juno	10 1100 lm	9 90CRI	30 3000K	S Spot (15°) NF Narrow Flood (30°)	1 120V	W White (matte) B Black (matte)
		30 3000lm	9 90CRI	30 3000K	NF Narrow Flood (22°) F Flood (36°)		

Dimensions









Features

- 1. Track attachment fitting: Molded polycarbonate. Rotates into place with the use of a push tab.
- 2. Push tab: Molded polycarbonate. Locks and detaches unit.
- 3. Driver and optic housing: 1100lm: Plastic 3000lm: Cast aluminum (plastic front cap) Horizontally rotates 360° and vertically rotates 90°.
- 4. **Movable contact:** Solid brass. Extends for connection to 2nd circuit in Advent track.
- 5. Integrated heat sink: Passive cooling, integrated into optic and driver housing.

- 6. Finish: Ma
- 7. **Lifetime:** TH10: B50L70 = 40,000 hrs TH30: B50L70 = 60,000 hrs
- 8. Install: Suitable for ceiling mounted track only. Compatible with LyteSpan track sytems (Basic, Radius, Advent and Monopoint). Not compatible with extension wands.
- 9. Light source: LED

Electrical

Electronic PSU Input Voltage 120V 50/60Hz

	Dimming
latte white and matte black.	

	TH10 SP	TH30 NF	TH30
DVELV-300 (ELV)	6%	6%	9%
DV-603P (TRIAC)	1%	8%	18%
AY-600P (TRIAC)		12%	10%
MALV-600 (ELV)	1%	3%	

Labels

ETL listed. ENERGY STAR® certified.

Specifications	Beam Angles	Lumens	Power	Efficacy	CBCP
TH10930S1W	15° Spot	1154lm	13.6W	84.9 lm/W	12,278 cd
TH10930NF1W	30° Narrow Flood	1271lm	16.3W	78 lm/W	3,466 cd
TH30930NF1W	22° Narrow Flood	3192 lm	35.8W	89.2 lm/W	11,988 cd
TH30930F1W	36° Flood	3442lm	38.4W	89.6 lm/W	8.107 cd







TH Track Head

1100lm & 3000lm

Aiming angles

 \boldsymbol{L} and \boldsymbol{W} are the outer points where the candle power drops to 50% of the maximum. **FC** are the initial footcandles at the center of the beam. Data shown is for 3000K, for 2700K multiply FC by 0.91.



Beam length

Distance Beam Width Aiming Angle Footcandles

Distance to center beam CBCP Center Beam Candlepower.



Fixture: TH10930S1W

Output lumens: Input watts²: Efficacy: 1154 lm 13.6 W 84.9 lm/w 90 min CRI: CBCP.: 12,278 cd 15° Beam Angle:



30° Vertical Aiming

Distance			Beam	1
D	С	F.C.	L	W
2	3.5	384	2.2	1.1
3	5.2	171	3.3	1.6
4	6.9	96	4.4	2.1
5	8.7	61	5.6	2.6



Fixture: TH10930NF1W

3000 K CCT1. Output lumens: Input watts²: Efficacy: 1271 lm 16.3 W 78.0 lm/w 90 min CRI: CBCP 3,466cd 30° Beam Angle:

Report no³: TH10930NF1W

N	21	***)V	,	51	n	n	ч

Distance D c

3.5

4.6 5.8 125 80 2.8 3.5

6

8 10

12 6.9 55 4.2 3.6

30° Horizontal Aiming

FC

222

W

1.8

Distance			Beam	n
D	С	F.C.	L	w
6	3.5	63	4.4	3.7
8	4.6	35	5.9	5.0
10	5.8	23	7.3	6.2
12	6.9	16	8.8	7.4

30° Vertical Aiming

Distance			Beam	<u> </u>
D	С	F.C.	L	W
2	3.5	108	5.5	2.1
3	5.2	48	8.2	3.2
4	6.9	27	10.9	4.3
5	8.7	17	13.7	5.4



Fixture: TH30930NF1W

3000 K 3192 lm 35.8 W CCT1: Output lumens: Input watts²: Efficacy: 89.2lm/w 90 min CBCP.: 11,988 cd 22° Beam Angle:

Report no³: TH30930NF1W

Narrow Flood

30° Horizontal Aiming

Distance			Beam		
D	С	F.C.	L	W	
6	3.5	216	3.1	2.7	
8	4.6	122	4.2	3.6	
10	5.8	78	5.2	4.5	
12	6.9	54	6.3	5.4	

	o verticut / iiiiiiii						
Distance			Beam	·			
D	С	F.C.	L	w			
2	3.5	375	3.5	1.6			
3	5.2	166	5.3	2.3			
4	6.9	94	7.0	3.1			
5	8.7	60	8.8	3.9			



Fixture: TH30930F1W

3000K 3442lm 38.4W 89.6lm/w CCT1: Output lumens: Input watts²: Efficacy: CRI: 90 min CBCP.: Beam Angle: 8,107cd 36°

Report no³: TH30930F1W

Flood

30° Horizontal Aiming

Distance			Beam		
D	С	F.C.	L	W	
6	3.5	146	5.4	4.5	
8	4.6	82	7.2	6.0	
10	5.8	53	9.0	7.5	
12	6.9	37	10.8	9.0	

30° Vertical Aiming

Distance			Beam	1
D	С	F.C.	L	W
2	3.5	253	7.6	2.6
3	5.2	113	11.4	3.9
4	6.9	63	15.2	5.2
5	8.7	41	19.0	6.5

- 1. Correlated Color Temperature: within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
- 2. Wattage: controlled to within 5%.
- 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

(s)ignify

INTERIOR 2' x 2' T-BAR FIXTURE (KITCHEN)

LRTA-C29

Premium-Grade Recessed Wet Location Luminaire

LED	ARCHITECTURAL LIGHTING	VISIONEERING
		▼ by VISCOR

Project:	Catalogue #:	Type:
Notes:		

Product Description

Premium-grade enclosed and gasketed luminaire. This IC-rated luminaire's welded steel housing, shallow design and dust and moisture resistance, make it ideal for use with indoor and outdoor (canopy) applications that require a wet location recessed lay-in T-Bar/Drywall luminaire with a door frame.

Features

- Ideal for shallow or obstructed plenum applications
- · Frosted prismatic acrylic diffuser
- Standard low voltage dimming (0-10v)
- 80+ CRI
- Available in 1x4, 2x 2, 2x4

Featured Options

- NSF
- · Step dimming
- Various lenses
- · Fasteners Tamper Proof

Applications

- · Outdoor, under covered canopy
- Wet and Dusty Environments

Fasteners lamper

Optical System

One piece perimeter door frame with inverted frosted, prismatic pattern #12, sealed acrylic lens. Other lenses available (see options).

Mounting

Holes provided for chain-mounting support to building structure. Lay-in type luminaire for exposed grid type acoustical ceiling structure and swing style mounting brackets for drywall ceiling installation.

Construction

Die-formed and spot welded, steel housing assembly and 20 gauge steel door frame. Triple gasketed with sealed lens, gasketed door frame assembly and gasketed housing flance.

Finish

White, polyester powder painted housing.

Flectrica

Long life LEDs coupled with high efficiency drivers provide quality illumination. Rated to deliver L80 performance > 50,000 hours.

Warranty

5 year limited warranty. For complete warranty terms visit: http://viscor.com/assets/Viscor_LED_Warranty.pdf

Approvals

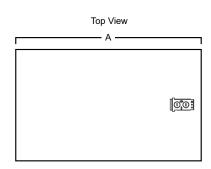




Approved to CSA/UL standards.UL listed for insulated ceilings. Tested in accordance to IESNA LM-79. UL listed for wet locations.



Dimensions





В _____

End View

	Α	В	С
1x4	47 3/4"	11 3/4"	3 15/16"
2x2	23 3/4"	23 3/4"	3 15/16"
2x4	47 3/4"	23 3/4"	3 15/16"

Consult installation guide for exact dimensions.

INTERIOR 2' x 2' T-BAR FIXTURE (KITCHEN)

LRTA-C29

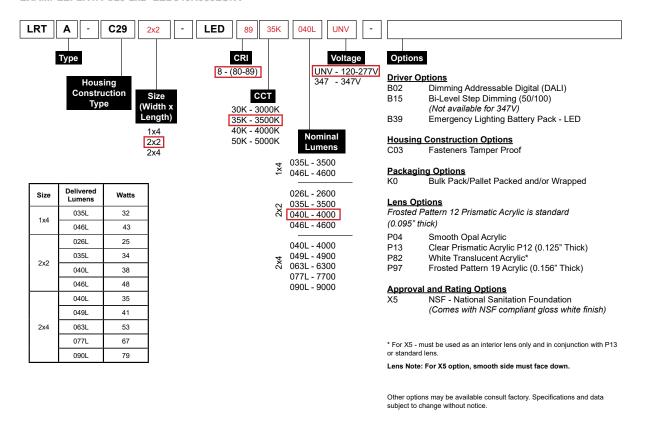
Premium-Grade Recessed Wet Location Luminaire

LED	ARCHITECTURAL LIGHTING	VISIONEERING
		by VISCOR

Project:	Catalogue #:	Туре:
Notes:		
		1

Order Key

EXAMPLE: LRTA-C29-2x2- LED840K035LUNV



EMERGENCY LIGHT WITH BATTERY



ESL Series

6, 12 and 24V

10-year life expectancy, maintenance-free emergency lighting units.

The ESL Series battery units combine long life expectancy, high-performance design and a reasonable initial cost outlay. Ideally suited for a range of commercial applications, the long-life lead acid battery is specifically recommended for environments where the unit will be exposed to large variances in ambient temperature.

FEATURES

- Rugged steel cabinet with corrosion-resistant undercoating
- Removable front panel on cabinet provides easy access and allows the unit to be mounted at ceiling height
- Solid-state pulse-type charger current-limited, temperaturecompensated, short-circuit proof and reverse-polarity protected.
- Unit comes standard with electronic lockout and brownout circuits
- Sealed dust-proof transfer relay, test switch and LED indicator lights
- Long-life, maintenance-free lead acid battery
- NEXUS® compatible (for more information on NEXUS®, please consult your sales representative)
- CSA C22.2 No. 141 certified
- Standard 120/347 VAC input with line cord kit
- Advanced diagnostics capabilities (specific load requirements) See warranty details at: www.tnb.ca/en/brands/emergi-lite



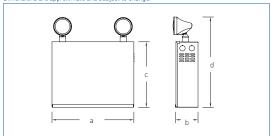




CABINET	DIMENSIONS					
CADINET	Α	В	С	D		
А	13 ^{1/4} "	3 ^{5/8} "	10 ^{1/2} "	14 ^{1/4} "		
	(33.7 cm)	(9.2 cm)	(26.7 cm)	(36.2 cm)		
В	16 ^{1/8} "	5 ^{1/2} "	10 ^{1/4} "	13 ^{7/8} "		
	(40.9 cm)	(13.9 cm)	(26.0 cm)	(35.2 cm)		
С	23 ^{1/8} "	5 ^{1/2} "	10 ^{1/4} "	13 ^{7/8} "		
	(58.7 cm)	(13.9 cm)	(26.0 cm)	(35.2 cm)		

DIMENSIONS

Dimensions are approximate and subject to change.



TYPICAL SPECIFICATIONS

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Emergi-Lite® Smart Diagnostic micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed. The unit shall have an output of: _____V and ______W.

The charger shall be fully computer tested and its charge voltage factory set to $\pm\,1\%$ tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, and when the battery is at full capacity, the charger will shut off.

Periodically the charger shall provide a pulse of energy to keep the battery topped off. The pulse charger shall be precisely regulated and shall charge the battery in relation to its temperature, state or charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected.

The unit shall be furnished with an electronic lockout circuit, which will connect the battery when the AC circuit is activated, and an electronic brownout circuit, which will activate the emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load when the battery reaches the end of discharge. The unit shall self-test for 1 minute every 30 days, 10 minutes every 6 months and 30 minutes every 12 months. The unit shall be capable of full recharge in compliance with CSA specifications. The unit shall be furnished with a sealed dust tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate. The emergency lighting heads shall require no tools for orientation.

The unit shall be **Emergi-Lite®** model: 12ESL72/2LG

WIRE GUARDS

460.0078-E	Wall Mount	"A" Cabinet	
460.0081-E	Wall Mount	"B" Cabinet	
460.0034-E	Wall Mount	"C" Cabinet	

REPLACEMENT LAMPS

ORDERING CODE	LAMP TYPE	VOLTAGE/WATTAGE
580.0097-E	MR16 LED	6V-4W
580.0122-E	MR16 LED	6V-5W
580.0093-E	MR16 LED	12V-4W
580.0098-E	MR16 LED	24V-4W
580.0100-E	MR16 LED	24V-6W
580.0104-E	MR16 LED	12V-5W
580.0106-E	MR16 LED	12V-6W

EMERGENCY LIGHT WITH BATTERY

n = new options

ESL Series

6, 12 and 24V



POWER CONSUMPTION AND UNIT RATING

MODEL	AC SPECS		WATTAGE CAPACITY				
MODEL	A	IC SPECS	30 MIN	1H00	1H30	2H00	4H00
06ESL36		0.10/0.04 A	36	21	15	12	6
06ESL72		0.22/0.08 A	72	42	30	24	12
06ESL108		0.22/0.08 A	108	63	45	36	18
06ESL180		0.22/0.08 A	180	105	75	60	30
12ESL36		0.09/0.03 A	36	21	15	12	6
12ESL72		0.15/0.06 A	72	42	30	24	12
12ESL100		0.34/0.12 A	100	58	42	33	17
12ESL144		0.40/0.14 A	144	84	60	48	24
12ESL216	120/347VAC	0.41/0.14 A	216	117	83	67	33
12ESL250	120/347 VAC	0.41/0.14 A	250	144	100	38	42
12ESL360		0.41/0.14 A	360	200	144	108	60
24ESL144		0.43/0.15 A	144	84	60	48	24
24ESL200		0.55 / 0.20 A	200	117	83	67	33
24ESL288		0.67 / 0.23 A	288	168	120	96	48
24ESL350		0.67 / 0.23 A	350	200	144	120	60
24ESL432		0.67 / 0.23 A	432	250	180	144	72
24ESL550		0.88 / 0.33 A	550	320	230	180	90
24ESL720		0.88 / 0.33 A	720	420	300	240	120

Note: Low wattage LED lamps provide extended time of emergency lighting without additional power.

ORDERING INFORMATION

OKDE	TING INFOR	MATION				
SERIES	CAPACITY & CABINET SIZE ¹	COLOUR	VOLTAGE	OPTIONS	# OF HEADS	HEADS STYLE/WATTAGE
06ESL= 6V 12ESL= 12V	36= 36W (A) 72= 72W (A) 108= 108W (A) 180= 180W (B) 36= 36W (A) 72= 72W (A) 100= 100W (A) 144= 144W (A) 216= 216W (B) 250= 250W (B) 360= 360W (B)	Blank= factory white BK= black	Blank= 120/347VAC input - 2 = 277VAC input	U= auto-diagnostics¹ UN= auto-diagnostics non-audible¹ NEX= NEXUS® system interface¹ NEXR= wireless NEXUS® system interface¹ A= ammeter V= voltmeter QF93= constant power supply 3 Amps, 24V only⁴ 0 CT= cab-tire D= time delay	/0= no heads /1= one head /2= two heads /3= three heads	LA= MR16 LED, 6V-4W LB= MR16 LED, 6V-5W LG= MR16 LED, 12V-4W LI= MR16 LED, 12V-5W LJ= MR16 LED, 12V-6W LL= MR16 LED, 24V-4W LM= MR16 LED, 24V-6W
24ESL = 24V	144= 144W (A) 200= 200W (B) 288= 288W (B) 350= 350W (C) 432= 432W (C) 550= 550W (C) 720= 720W (C)			LW= twist-lock plug [120V] ² P= light activated test switch RFI= radio frequency interference filter, 120VAC		
	¹ Cabinet size is not part of nomenclature			Not available with 6V-108W. Minimum lamp load required: 20% of unit capacity. Not all options available with the NEKUS® system. Please consult your sales representative. 2 120V is standard 3 See zone control box in options section. B & C cabinet only. 4 "C" Cabinet only, 24V, 144W-720W.		

EXAMPLE: 06ESL108U/2LL

EMERGENCY LIGHTS C/W 2 HEADS

EF9M Series

LED



FEATURES

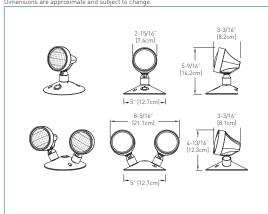
- Fire-retardant thermoplastic
- 300° rotation
- CSA certified to C22.2 No. 141
- 6, 12 and 24V with various wattages See warranty details at: www.tnb.ca/en/brands/emergi-lite





DIMENSIONS

Dimensions are approximate and subject to change



TYPICAL SPECIFICATIONS

Lamp head and stem shall be injection molded, impact resistant, flame retardant thermoplastic and shall require no tool for aiming or adjustment. The lens shall be inverse concave design and fully adjustable for aisle or area distribution during installation without the need to energize the lamp. Visual identification of distribution shall be provided through position of adjustment pins.

Fixture shall be supplied with a canopy for installation on any four inch octagon box. Housing shall be designed to allow for lamp replacement if required.

The remote unit shall be the **Emergi-Lite®** model: **EF9DMLG**

WIRE GUARDS

460.0029-E	Wall ceiling Mount

REPLACEMENT LAMPS

MODEL	LAMP TYPE	VOLTAGE/WATTAGE
580.0097-E	MR16 LED	6V-4W
580.0122-E	MR16 LED	6V-5W
580.0093-E	MR16 LED	12V-4W
580.0098-E	MR16 LED	24V-4W
580.0100-E	MR16 LED	24V-6W
580.0104-E	MR16 LED	12V-5W
580.0106-E	MR16 LED	12V-6W

ORDERING INFORMATION

SERIES	NUMBER OF LAMPS	LAMP TYPE	COLOUR	VOLTAGE/WATTAGE
EF9= mini, PAR 18	Blank= single head D= double head T= triple head	M= MR16 LED	Blank= factory white -B= black	-LA= MR16 LED, 6V-4W -LB= MR16 LED, 6V-5W -LG= MR16 LED, 12V-4W -LI= MR16 LED, 12V-5W -LJ= MR16 LED, 12V-6W -LJ= MR16 LED, 24V-6W -LL= MR16 LED, 24V-6W

EXAMPLE: EF9M-LM

EXIT SIGN + EMERGENCY LIGHTS



ESC Series

Steel Combination Unit

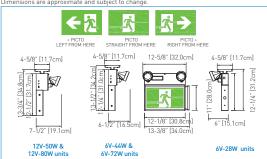
FEATURES

- Universal mounting: end, wall or ceiling
- Meets or exceeds CSA 22.2 No.141-15 standard for unit equipment and pictogram Exit Signs
- Legend illuminated by long-life white LED's
- Sealed, maintenance-free, 6V or 12V Lead-Calcium battery
- Remote load capacity: 80W up to 560' of egress illumination when using LED remote heads
- Advanced diagnostics capabilities (specific load requirements) See warranty details at: www.tnb.ca/en/brands/emergi-lite





DIMENSIONS



TYPICAL SPECIFICATION

Supply and install Emergi-Lite® ESC Series combination emergency light battery unit and pictogram Exit Sign. The unit shall be made of solid steel sheet metal and be suitable for universal mounting: wall, end, or ceiling. The legend housing shall have a maximum depth of 2-1/8". The legend face plate(s) shall be constructed of robust clear polycarbonate panel(s) with an opaque border coloured factory-white. The light source shall be white light-emitting diodes (LED) and shall provide even illumination in normal and emergency operation. The power pack shall include one circuit board with test switch and pilot light for battery charger and legend LED driver. The unit shall include one 6V or 12V, maintenance-free, sealed Lead-Calcium battery and shall provide minimum 30 minutes of emergency lighting upon AC power failure. The electrical power available for emergency lights shall be 28W or up to 72W, for 6V and 50W or up to 80W for 12V, as specified. The emergency heads shall require no tools to adjust and aim. The equipment shall meet or exceed the requirements of CSA 22.2 No.141-10 standard.

The equipment shall be Emergi-Lite Model: ESC44W2LA

WIRE GUARDS

460.0081-E	Wall mount
460.0060-E	Ceiling mount

POWER CONSUMPTION

MODEL		AC SPECS	EMERGENCY POWER AVAILABLE FOR LAMPS				
MODEL		AC 3FEC3	30MIN 1H00 1H30 2H00			4H00	
Pictogram Module		Less than 1.5W	-	-	-	-	-
ESC28			28	16	12	9	-
ESC44	120/347VAC	0.13 / 0.05 A	44	26	18	15	7
ESC72	12U/34/VAC		72	42	30	24	12
ESC-1250		0.25 / 0.09 A	50	29	21	16	8
ESC-1280		0.25 / 0.09 A	80	46	32	27	13

ORDERING INFORMATION

SERIES	POWER EM. LIGHTS	HOUSING COLOUR	HEADS	HEAD STYLE AND WATTAGE	VOLTAGE	OPTIONS
ESC= pictogram steel combo exit sign	28= 6V-28W 44= 6V-44W 72= 6V-72W 1250= 12V-50W 1280= 12V-80W	B= black W= factory white	Blank= no heads 1= one head 2= two heads	Blank= no heads [A= MR16 LED, 6V-4W] LB= MR16 LED, 6V-5W LG= MR16 LED, 12V-4W LI= MR16 LED, 12V-5W LJ= MR16 LED, 12V-6W	Blank= 120/347 VAC -2= 120/277VAC input	Blank= no options U= auto-diagnostics¹ UN= auto-diagnostics¹ NEX= NEXUS® system interface² NEXRF= wireless NEXUS® system interface DF= double face sign D3= time delay [15 minutes] -TP= tamper-proof screws³ U9= arrow up D9= arrow down U4= arrow up 45° D4= arrow down 45° ¹ Not available with 6V models ² Not available with 6V-72W ³ 990.0119-E= tamper-proof bit (sold separately)

EMERGI-LITE EMERGENCY LIGHTING SOLUTIONS

Survive-All™ NXM Series

NEMA-4X



Features

- Fully gasketed cast aluminum back plate with clear polycarbonate cover – NEMA-4X Certified
- Comes standard with non-audible advanced diagnostic,
 15 minutes time delay and lamp disconnect
- Audible warning and time delay functions can be enabled or disabled during installation
- Micro-controller diagnostic system tests, detects and indicates battery, charger circuitry or LED lamp failures
- · Non-intrusive magnetic test switch
- · Long-life, maintenance-free sealed lead-acid battery
- 1/2" rigid conduit entry on top and back
- Can be installed on 4" junction boxes
- · Comes standard with tamper-proof screws and bit
- Cold weather option -40°C (-40°F)
- NSF Certified for food processing plants
- Standard 120/347VAC input voltage
- Meets and exceeds CSA C22.2 No. 141-15 Certified
- Advanced diagnostics capabilities (specific load requirements)
- · Warranty details at: www.tnb.ca/en/brands/emergi-lite

nexus Nexus Pro











Typical specifications

Supply and install the Emergi-Lite® NEMA-4X Certified Survive-All™ NXM Series battery unit. Specifically designed for high abuse areas, wet locations, and cold weather (CW option -40°C (-40°F)), the housing shall consist of a fully gasketed Die-Cast with a cast aluminum back plate and a clear heavy-duty UV resistant polycarbonate cover. The heads shall be fully adjustable without tools and the lamps shall be high efficiency MR16 LED. The standard unit shall be equipped with tamper-proof screws and bits.

The Emergi-Lite® Advanced Diagnostic Micro-controller charger board shall supply the rated load for a minimum of 30 minutes to 87.5% of the rated battery voltage. The charger incorporates lockout and brownout circuits, and low voltage disconnection. It protects the unit from over-current, shortcircuit, and reverse polarity. The unit shall be rated 120/347V, 60Hz.

The unit shall have an output of V. This unit shall self-test for 1 minute every 30 days, 10 minutes every 6 months and 30 minutes every 12 months. The unit shall be furnished with a non-intrusive magnetic test switch. A "Service Required" lamp shall be located near the test switch and flash when a fault is detected. A four-LED diagnostic display shall be located inside the equipment and shall identify the source of failure (battery, charger, circuitry, or lamps).

The unit shall be CSA 22.2 No. 141-15 Certified

The equipment shall be **Emergi-Lite®** Model: 06NXMB36/2LA

Wire guards

Description
Wall mount

Replacement lamps

Ordering code	Lamp type	Voltage/wattage
580.0097-E	MR16 LED	6V-4W
580.0122-E	MR16 LED	6V-5W
580.0093-E	MR16 LED	12V-4W
580.0104-E	MR16 LED	12V-5W
580.0106-E	MR16 LED	12V-6W

Survive-All™ NEMA 4X & NSF certified family



EXTERIOR WALL MOUNTED EMERGENCY LIGHT + BATTERY

BATTERY UNITS - SURVIVE ALL NXM SERIES

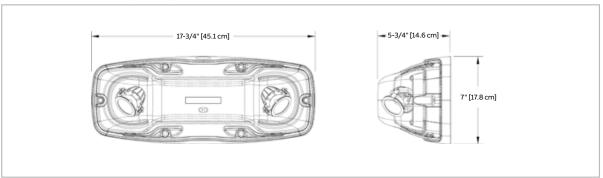
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Survive-All™ NXM Series

NEMA-4X

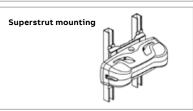
Dimensions

Dimensions are approximate and subject to change.









Power consumption and unit rating

		<u> </u>			Wattag	e capacity	
Model		AC specs	30 min	1H00	1H30	2H00	4H00
06NXM36		0.15/0.06 A	36	21	15	12	6
12NXM72	120/247\/AC	0.25/0.10 A	72	42	30	24	12
120/347VAC — 12NXM108		0.25/0.10 A	108	63	45	36	18
Cold weather 36W		0.45/0.20 A	36	_	_	-	_
Cold weather 72/108W	120VAC	0.85 A	72/108	_	_	-	_

Note: Capacity depends on the ambient temperature.

Ordering information

Series	Colour	Capacity	Voltage
06NXM = 6V, NEMA-4X	B= black	36 = 6V-36W	2 = 277VAC
12NXM = 12V, NEMA-4X	G = grey	72 = 12V-72W	Blank= 120/347VAC
	W = white	108 = 12V-108W	
	Options	# of heads	Lamps
	690.0454-E= additional-bit for tamper-proof screws	/2= 2 heads	LA = MR16 LED, 6V-4W
	(sold separately)		LB = MR16 LED, 6V-5W
	Blank= auto-diagnostic, non audible		LG = MR16 LED, 12V-4W
	CW1= cold weather 120VAC		LI= MR16 LED, 12V-5W
	CW3= cold weather 347VAC ¹		LJ = MR16 LED, 12V-6W
	NEX= NEXUS® system interface		
	NEXP= NEXUS®Pro IoT		
	NEXRF= wireless NEXUS® system interface		
	PMK-E= universal bracket (sold separately)		Note: Minimum lamp load required: 20% of unit
Example: 06NXMW36/2LA	¹ Available in 6V only		capacity