

CATALOG #: _____
TYPE: _____
PROJECT: _____

NEW CONSTRUCTION AND REMODEL

FEATURES

- Beam angles ranging from 25° narrow to 65° wide for tailored performance
- Die cast trim choices include flush, regressed or angled lens
- Spring clip retention system eliminates trim sag
- Industry-leading efficacies as high as 99 lm/W

SPECIFICATIONS

- HOUSING – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2" – 2-1/4".
- OPEN REFLECTOR – Low-iridescent anodized aluminum with top diffuser.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, tempered glass lens.
- ELECTRICAL – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. Minimum 24" O.C. marked spacing required for L50 - L70 lumen packages.
- LISTINGS –
 - cSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for damp locations. LED light assembly conforms to UL 2108 for remote installation.
 - Suitable for wet location under covered ceiling when specified with WET/CC option.
 - IC-rated for direct contact with insulation when specified with I Mounting Type.
 - City of Chicago Environmental Air approved when specified with CP option.
 - Complies with ASTM-E283 when specified with ATH option.
 - RoHS compliant.
 - Title 24 (JAB) compliant in select configurations, see www.cacertappliances.energy.ca.gov.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: 6DS - L20/835 - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

HOUSING

SERIES	LUMENS ^[1]	CRI	CCT	OPTIONS	CONTROL ^[2]	VOLTAGE
6DS	L10 1,000lm ^[3]	8 80	27 2700K	ATH Airtight construction	DIM Dimming driver, 0-10V	UNV 120-277V 347 347V ^[7]
	L15 1,500lm	9 90 ^[4]	30 3000K	CP Chicago plenum (CCEA) ^[5]		
	L20 2,000lm		35 3500K	F Fuse kit		
	L30 3,000lm		40 4000K	F Stepdown transformer ^[6]		
	L40 4,000lm		50 5000K	SDT 7-watt emergency battery ^[8]		
	L50 5,000lm			EM/7W 10-watt emergency battery ^[9]		
	L60 6,000lm			EM/10W/RTS 10-watt emergency battery with regressed test switch ^[10]		
L70 7,000lm						

TRIM ^[11]

TRIM TYPE	DISTRIBUTION ^[12]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
O Open reflector	W Wide	OF 1/2" standard flange	Open trim types	MWT Textured white trim flange ^[18]
L Flush lens	55° Open	SF 1/4" mud-in flange ^[17]	CS Clear semi-specular anodize	IP IP65 rated trim ^[19]
R Regressed lens	65° Flush		SG Satin-glow anodize	AD Diffuse acrylic lens ^[20]
A Angled lens ^[13]	65° Regressed		GD Gold anodize	PD Diffuse 1/8" polycarbonate lens ^[21]
	M Medium ^[14]		CG Champagne gold anodize	WET/CC Wet location, covered ceiling listed ^[22]
	50° Open		PW Pewter anodize	AM Anti-microbial ^[23]
	35° Flush		SPC Clear specular anodize	
	35° Regressed		RG Rose gold anodize	
	N Narrow ^[15]		Lens trim types	
	45° Open		CS Clear semi-specular powder coat	
	25° Flush		WH White texture powder coat	
	25° Regressed		BL Black texture powder coat	
WW Wall wash ^[16]			MB Black texture splay with white flange ^[24]	

MOUNTING

MOUNTING TYPE ^[25]

- N Open pan for new construction
- I IC-rated enclosure for new construction ^[27]
- R Remodel kit ^[28]

MOUNTING HARDWARE ^[26]

- F1 Integral 2-position fixed pan bracket, universal bar hanger included ^[29]
- BA1 Adjustable butterfly pan bracket, bar hanger not included ^[30]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included ^[31]

NOTES

- 1 Lumen output based on L trim type, W distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- 2 See page 4 for ADDITIONAL CONTROL OPTIONS.
- 3 Not available with EM/10W emergency batteries.
- 4 Extended lead times may apply. Consult factory for availability.
- 5 I Mounting Type required.
- 6 May be required for 347V, see product builder at hew.com/product-builder.
- 7 Not available with EM batteries or DMX controls.
- 8 N and R Mounting Types only.
- 9 N and R Mounting Types only.
- 10 Not available with WET/CC, ATH or IP options. N and R Mounting Types only. See page 5 for EM/10W/RTS DETAILS.
- 11 Trim ships separately.
- 12 Beam angle based on CS or WH reflector finish.
- 13 Available with WW Distribution only.
- 14 Not available with L50 - L70.
- 15 Not available with L50 - L70.
- 16 O and A Trim Types only.
- 17 For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for FLANGE TYPE DETAILS. Not available with ATH or IP options.
- 18 Not available with WH Reflector Finish or L Trim Type.
- 19 L and R trim types only.
- 20 Not available with O trim type. W distribution only.
- 21 Not available with O trim type. W distribution only.
- 22 Not available with O Trim Type.
- 23 WH and BL Reflector Finishes only.
- 24 R Trim Type only Not available with MWT.
- 25 Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
- 26 Additional mounting hardware options available. See page 6 for MOUNTING HARDWARE DETAILS.
- 27 L20 lumen package max. L30 available, wide distribution only.
- 28 Also used in new construction sheetrock ceilings.
- 29 N and I Mounting Types only. I Mounting requires external brackets.
- 30 N Mounting Type only
- 31 N Mounting Type only



6DS LED 6" Downlight – Square

FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	966	10.6	91.1
	M	789	10.6	74.4
	N	777	10.6	73.3
L15	W	1452	16.0	90.5
	M	1185	16.0	73.9
	N	1167	16.0	72.7
L20	W	1936	22.5	88.0
	M	1580	22.5	70.3
	N	1556	22.5	70.7
L30	W	2823	31.0	91.1
	M	2283	31.0	73.6
	N	2196	31.0	70.8
L40	W	3807	41.7	91.2
	M	3066	41.7	73.4
	N	2855	41.7	68.4
L50	W	4786	52.0	92.0
	M	-	-	-
	N	-	-	-
L60	W	5599	64.6	86.7
	M	-	-	-
	N	-	-	-
L70	W	6557	78.1	84.0
	M	-	-	-
	N	-	-	-

FLUSH LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1037	10.6	97.8
	M	1056	10.6	99.6
	N	1031	10.6	97.3
L15	W	1551	16.0	96.7
	M	1589	16.0	99.0
	N	1547	16.0	96.4
L20	W	2068	22.5	92.1
	M	2118	22.5	94.3
	N	2063	22.5	91.8
L30	W	3030	31.0	97.7
	M	3056	31.0	98.6
	N	2916	31.0	94.1
L40	W	4087	41.7	97.9
	M	4104	41.7	98.3
	N	3791	41.7	90.8
L50	W	5137	52.0	98.8
	M	-	-	-
	N	-	-	-
L60	W	6009	64.6	93.1
	M	-	-	-
	N	-	-	-
L70	W	7038	78.1	90.2
	M	-	-	-
	N	-	-	-

REGRESSED LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	994	10.6	93.8
	M	1026	10.6	96.8
	N	1008	10.6	95.0
L15	W	1494	16.0	93.1
	M	1547	16.0	96.4
	N	1514	16.0	94.4
L20	W	1992	22.5	90.5
	M	2062	22.5	91.8
	N	2019	22.5	91.8
L30	W	2905	31.0	93.7
	M	2971	31.0	95.8
	N	2849	31.0	91.9
L40	W	3917	41.7	93.8
	M	3990	41.7	95.6
	N	3705	41.7	88.7
L50	W	4924	52.0	94.7
	M	-	-	-
	N	-	-	-
L60	W	5760	64.6	89.2
	M	-	-	-
	N	-	-	-
L70	W	6746	78.1	86.4
	M	-	-	-
	N	-	-	-

MULTIPLIER TABLES

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
	5000K	1.02
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

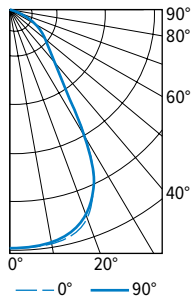
OPEN REFLECTOR FINISH		
CATALOG NUMBER	REFLECTOR FINISH	CONVERSION FACTOR
CS	Clear semi-specular	1.00
SG	Satin-glow	0.92
GD	Gold	0.93
CG	Champagne Gold	0.96
PW	Pewter	0.86
SPC	Specular	1.02
RG	Rose Gold	0.88
WH	White, textured	0.89
BL	Black, textured	0.79

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

6DS-L20/835-DIM-UNV-LW-OF-WH Report #: 20349; 04/24/18 | Total Luminaire Output: 2068 lumens; 22.5 Watts | Efficacy: 92.1 lm/W | 83.5 CRI; 3456K CCT



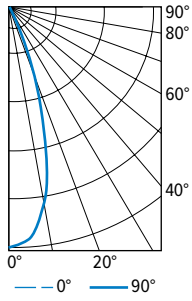
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1403	1403	1403	
5	1407	1400	1402	134
15	1375	1357	1357	386
25	1145	1263	1150	553
35	524	845	526	408
45	318	367	311	261
55	201	206	199	182
65	103	103	100	101
75	40	39	38	41
85	3	2	4	4
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1072	52
	0 - 40	1480	72
	0 - 60	1922	93
	0 - 90	2068	100
	0 - 180	2068	100



6DS LED 6" Downlight – Square

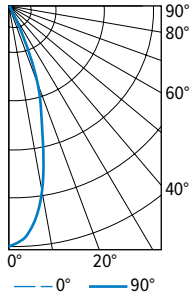
6DS-L20/835-DIM-UNV-LM-OF-WH Report #: 20351; 04/27/18 | Total Luminaire Output: 2118 lumens; 22.5 Watts | Efficacy: 94.3 lm/W | 83.5 CRI; 3456K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	5789	5789	5789	
5	5511	5522	5558	528
15	3318	3282	3262	928
25	933	923	798	416
35	211	239	170	134
45	54	77	61	53
55	35	35	33	31
65	21	19	20	20
75	9	7	8	9
85	0	0	0	0
90	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1872	88
	0 - 40	2005	95
	0 - 60	2090	99
	0 - 90	2118	100
	0 - 180	2118	100

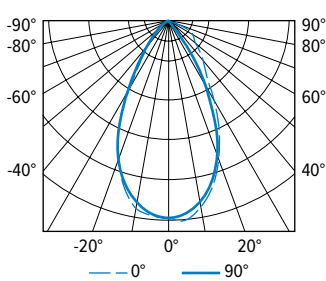
6DS-L20/835-DIM-UNV-LN-OF-WH Report #: 20352; 04/27/18 | Total Luminaire Output: 2063 lumens; 22.5 Watts | Efficacy: 91.8 lm/W | 83.5 CRI; 3456K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	8177	8177	8177	
5	7298	7406	7293	701
15	3140	3079	2928	853
25	692	698	584	306
35	164	167	128	96
45	60	69	57	49
55	34	36	33	31
65	20	20	18	19
75	7	8	7	9
85	1	0	0	0
90	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1859	90
	0 - 40	1955	95
	0 - 60	2035	99
	0 - 90	2063	100
	0 - 180	2063	100

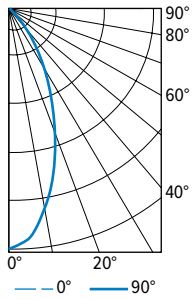
6DS-L20/835-DIM-UNV-OWW-OF-CS Report #: 20347; 04/24/18 | Total Luminaire Output: 1870 lumens; 22.5 Watts | Efficacy: 83.3 lm/W | 83.5 CRI; 3456K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1948	1948	1948	1948	1948	
5	1972	1951	1913	1908	1927	184
15	1704	1690	1659	1694	1700	476
25	1202	1218	1137	1214	1078	550
35	686	659	443	593	448	344
45	475	277	144	192	182	178
55	325	76	18	29	32	79
65	262	14	0	0	2	45
75	103	1	0	0	0	14
85	0	0	0	0	0	0
90	0	0	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1210	65
	0 - 40	1554	83
	0 - 60	1811	97
	0 - 90	1870	100
	0 - 180	1870	100

6DS-L20/835-DIM-UNV-OM-OF-CS Report #: 20345; 04/26/18 | Total Luminaire Output: 1580 lumens; 22.5 Watts | Efficacy: 70.3 lm/W | 83.5 CRI; 3456K CCT



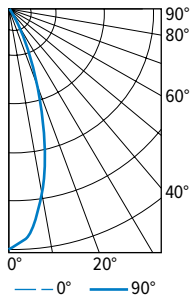
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2427	2427	2427	
5	2319	2317	2327	222
15	1704	1692	1707	482
25	1013	998	1008	466
35	437	514	428	291
45	92	212	92	110
55	6	19	6	10
65	0	0	0	0
75	0	0	0	0
85	0	0	0	0
90	0	0	0	0

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1170	74
	0 - 40	1460	92
	0 - 60	1580	100
	0 - 90	1580	100
	0 - 180	1580	100



6DS LED 6" Downlight – Square

6DS-L20/835-DIM-UNV-RM-OF-WH Report #: 20356; 04/27/18 | Total Luminaire Output: 2062 lumens; 22.5 Watts | Efficacy: 91.8 lm/W | 83.5 CRI; 3456K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	5249	5249	5249	
	5	4976	4955	4996	474
	15	3042	3003	2991	854
	25	1018	966	899	449
	35	278	297	228	171
	45	79	93	64	62
	55	34	37	32	31
	65	17	14	14	15
	75	4	5	5	5
	85	0	0	0	0
	90	0	0	0	0

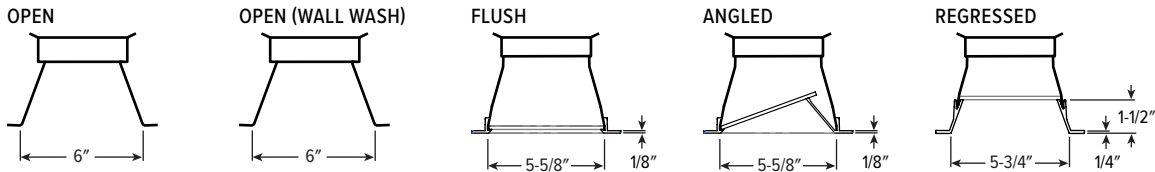
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1777	86
	0 - 40	1949	95
	0 - 60	2042	99
	0 - 90	2062	100
	0 - 180	2062	100

ADDITIONAL CONTROL OPTIONS

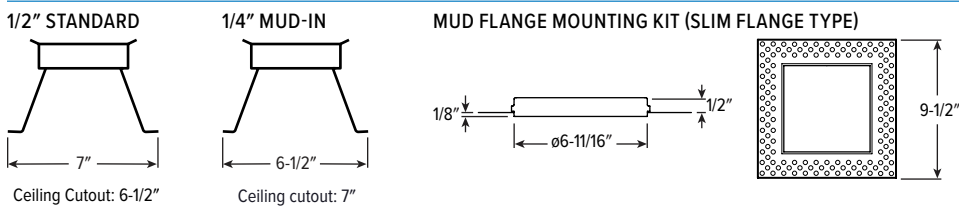
Lumen restrictions apply: L40 max for DMX driver, L40 max for Lutron drivers, L50 max for DIM LINE driver. R Mounting Type only available with DIM, DIM1, and DIM LINE controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DMX	0.1% dimming driver for DMX controls
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE5	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

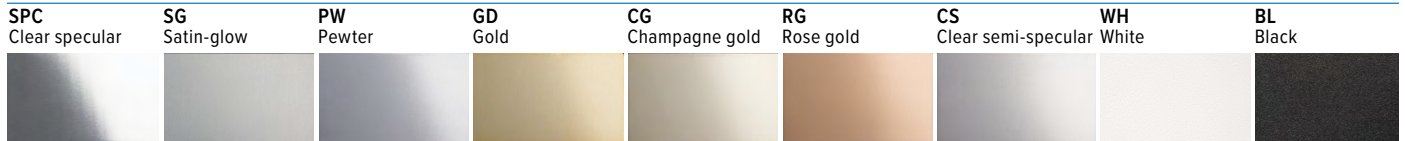
TRIM TYPE DETAILS



FLANGE TYPE DETAILS



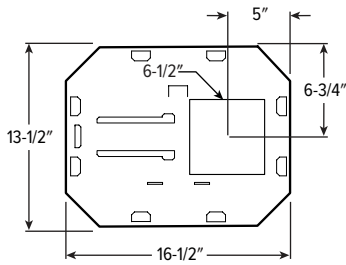
REFLECTOR FINISH DETAILS



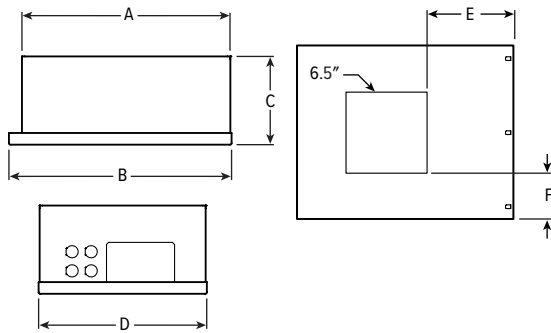
6DS LED 6" Downlight – Square

MOUNTING TYPE DETAILS

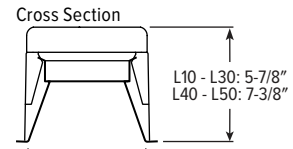
NEW CONSTRUCTION



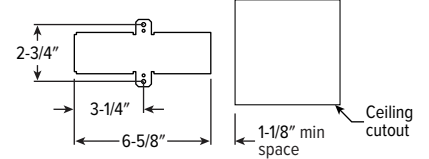
IC-RATED



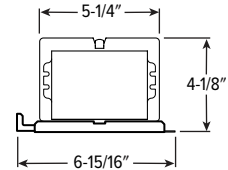
REMODEL



Receiver Bracket

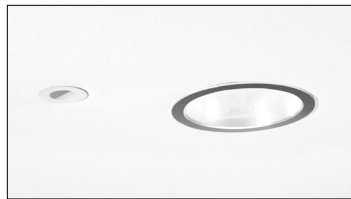


Driver and Junction Box

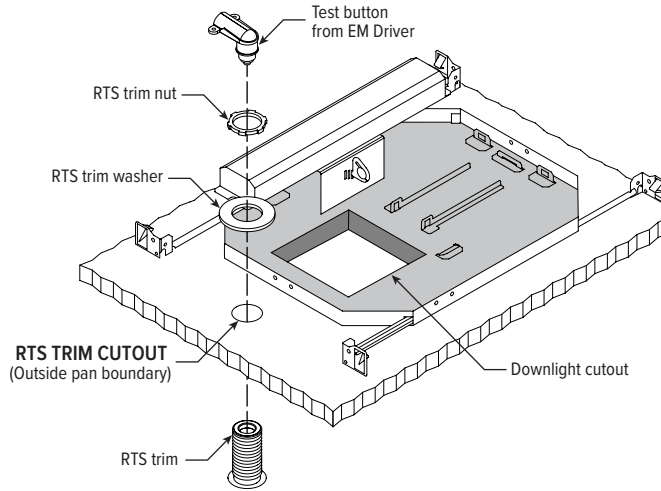


LUMENS	LENGTH					
	A	B	C	D	E	F
L10 - L20	15-3/16"	16"	6-3/8"	12-1/8"	6-1/4"	2-7/8"
L30	16-5/8"	17-1/2"	7-7/8"	14"	7"	3-3/4"

EM/10W/RTS DETAILS



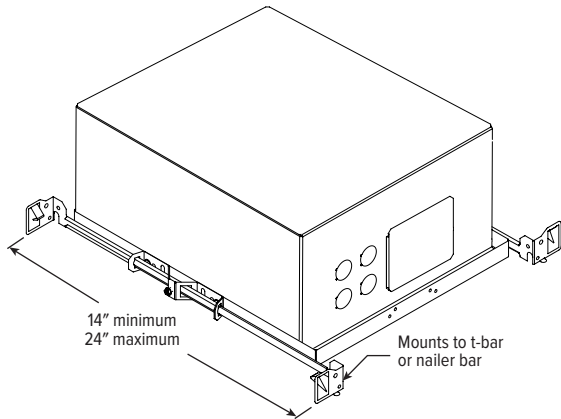
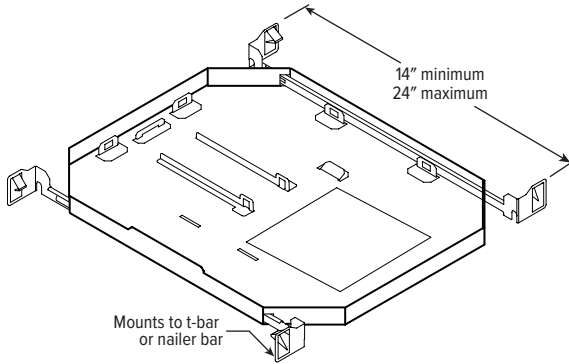
Shown Installed



6DS LED 6" Downlight – Square

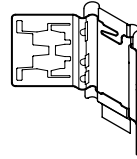
MOUNTING HARDWARE DETAILS

F1 Integral 2-position fixed pan bracket, universal bar hanger included

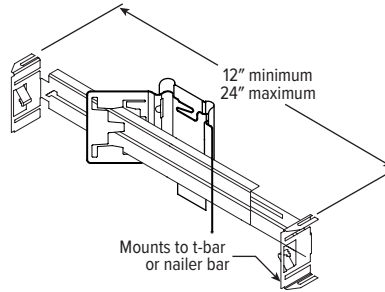


F1 with I Mounting Type

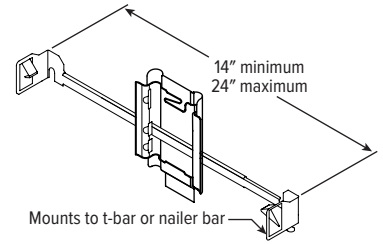
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

