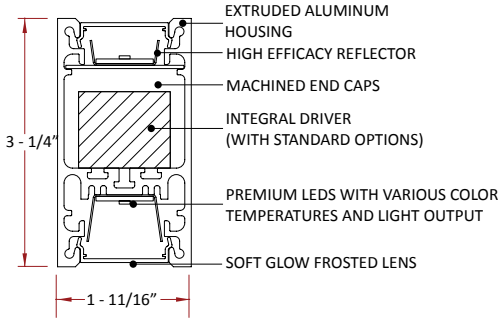


# Hassium <sup>1</sup>

## CABLE SUSPENDED (CS)



### FEATURES:

- 3/64" Aircraft cable suspension system
- High transmission frosted lenses with no diode imaging
- No visible fasteners
- Extruded aluminum housing
- Dimmable/Programmable drivers for controllable light output
- High efficacy LEDs with 5 year warranty
- Under 2 steps MacAdams Ellipse Binning
- 11/16" thick machined end caps
- Bi-directional fixture



### PRODUCT SPECIFICATION

**NOTE:** All options *italicized* may increase lead times and/or incur higher costs - please consult factory with questions.

FITTURE TYPE	MOUNTING/ ORIENTATION	NOMINAL LENGTH*	COLOR TEMP	LED DRIVE POWER		VOLTAGE	DRIVER
				DIRECT	INDIRECT*		
<b>Hs1</b> Hassium 1	<b>CS</b> Cable Suspended - BIDIRECTIONAL <b>CSD</b> Cable Suspended - DIRECT ONLY	1' 1'-1-3/8" 2' 2'-1-3/8" 3' 3'-1-3/8" 4' 4'-1-3/8" 5' 5'-1-3/8" 6' 6'-1-3/8" 7' 7'-1-3/8" 8' 8'-1-3/8" 12' 12'-1-3/8" <b>CR</b> Continuous Run (Specify length in nominal feet)	<b>27K</b> 2700K <b>30K</b> 3000K <b>35K</b> 3500K <b>40K</b> 4000K <b>50K</b> 5000K	<b>VLO</b> Very Low Output 305 lumens/ft. (4w/ft.) <b>LO</b> Low Output 465 lumens/ft. (6w/ft.) <b>SO</b> Standard Output 605 lumens/ft. (8w/ft.) <b>HO</b> High Output 760 lumens/ft. (10w/ft.) <b>VHO</b> Very High Output 885 lumens/ft. (12w/ft.) <b>CPO</b> Custom Power Output Consult factory	<b>VLO</b> Very Low Output 405 lumens/ft. (4w/ft.) <b>LO</b> Low Output 615 lumens/ft. (6w/ft.) <b>SO</b> Standard Output 805 lumens/ft. (8w/ft.) <b>HO</b> High Output 1,005 lumens/ft. (10w/ft.) <b>VHO</b> Very High Output 1,170 lumens/ft. (12w/ft.) <b>CPO</b> Custom Power Output Consult factory	<b>UNV</b> Universal (120-277v)	<b>ND</b> Non-Dimming 0-10v DIMMING <b>10D</b> 10% DIM <b>1D</b> 1% DIM LUTRON <b>LDE1</b> Lutron EcoSystem 1% "Soft on" (Digital) <b>LDES</b> Lutron EcoSystem 5% 5-Series (Digital) DALI <b>DALI</b> Digital Addressable Lighting Interface

\*Dimensions are for reference only. Contact factory for more specific information or shop drawings.  
\*\*Odd lengths may incur slightly higher per foot pricing.

\*Not Applicable with CSD option.

HOUSING FINISH	END CAP FINISH	CANOPY SIZE OPTIONS*	CANOPY FINISH	POWER CORD COLOR	AIRCRAFT CABLE LENGTH*	OPTIONS/ CUSTOMIZATION*
<b>SC</b> Satin Clear Anodize (Standard) <b>SW</b> Satin White (Powder Coat) <b>MB</b> Matte Black (Powder Coat) <b>CF</b> Custom Finish* (Consult Factory)  <b>CF</b>	<b>MF</b> Machined Finish (Standard) <b>CF</b> Custom Finish (Consult Factory)  <b>CF</b>	<b>44</b> 4" Power feed canopy 4" Non-power feed canopy <b>41</b> 4" Power feed canopy 1" Non-power feed canopy <b>40</b> 4" Power feed canopy Canopy only at power feed	<b>MF</b> Machine Finish (Standard) <b>SW</b> Satin White <b>CF</b> Custom Finish*	<b>W</b> White <b>G</b> Gray <b>B</b> Black <b>CC</b> Custom Cord (Consult Factory)	<b>2</b> 2' <b>4</b> 4' <b>6</b> 6' <b>8</b> 8' <b>CL</b> Custom Length** (Specify in feet IE: CL10 for 10')	<b>XX</b> No EMB or Customization <b>EMB7</b> 7 Watt battery back-up** (Approximately 600 lumens) <b>EMB12</b> 12 Watt battery back-up** (Approximately 1,000 lumens) <b>90</b> 90+ CRI LED BOARDS <b>CCP</b> Corners/patterns* <b>CD</b> Custom Driver* <b>CR</b> Customization Requested* <b>WSE</b> Enlighted <b>WSW</b> Wavelinx
*RAL and color match are available.	NOTE: MF option is strongly recommended. Other options will result in higher costs and potentially longer lead times.	*CONTINUOUS RUNS REQUIRE THE 55" OR THE 44" OPTION. CONSULT FACTORY WITH QUESTIONS. *See options section and installation instructions for more information.	*Just about any finish is possible. For the 4" machined canopies, MF is strongly recommended. Contact the factory with questions or requests.		*Cables are field adjustable. ** Consult factory to confirm specific length.	NOTE: Customization may incur higher costs and/or increased lead times. *Consult the factory for all custom options or custom concept requests. **The EMB12 is slightly more expensive than the EMB7 option (BOTH OPTIONS ARE INTEGRAL).

### SPECIFICATION INFORMATION

**NOTE:** All options *italicized in gray* may increase lead times and/or incur higher costs - please consult factory with questions.

#### GENERAL NOTES:

All fixtures are **UL listed** for **dry** and **damp** locations.

**INTEGRAL DRIVER** for all options.

Please contact the factory with any specification questions.

#### FIXTURE ORIENTATION:

Bidirectional (CS) for downlight and uplight applications.

Direct (CSD) for downlight applications.

#### DRIVER: [INTEGRAL]

1) NON-DIMMING: As described... this fixture will not dim.

2) DIMMING: 0-10v: 1%, 10% :: Lutron: 2-wire Forward phase (Hi-Lume 1%), Ecosystem to 1% (Soft On), Ecosystem to 5% (5 Series). "DALI" - Specify driver. See "Dimming Options" on subsequent pages for more information. For other dimming options, consult the factory.

3) EMERGENCY: Specify EMB under the Options/Customization category at the end of the cut sheet along with the desired lumen output (600 or 1,000 lumens - the latter is slightly more costly).

4) Drivers are programmed according to our standard lumen packages or to custom watt/lumen package requirements.

5) Consult factory with any questions or specification requirements.

#### FINISHES:

The standard finish is a Satin Clear anodized housing with Machine Finished hardware. Machined finish is preferable for machined components (Hardware Detail) - Powder coating these parts may result in additional costs. Consult the factory with any questions about standard or custom finishing options.

#### CUSTOMIZATION\*:

We have numerous custom options available. However, if there is something unique required for a project, from simple options to complete custom requests, we are more than willing to entertain any creative notions you might have. Just ask.



Lumium Lighting, LLC | 3590 Cadillac Ave, Suite A, Costa Mesa, CA 92626 | Phone: 760.757.2530 | Fax: 760.283.2333 | [www.lumiumlighting.com](http://www.lumiumlighting.com)

While we always strive to ensure all website content and product information is current, Lumium Lighting reserves the right to change specifications without notice.

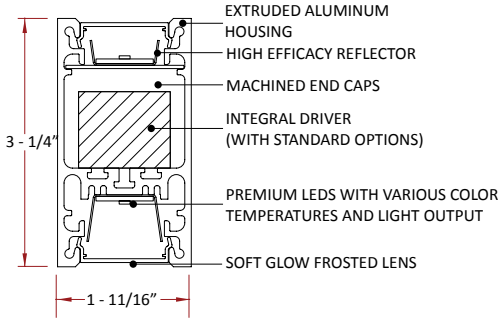
© Lumium Lighting, LLC - All rights reserved.



**Lumium**  
lighting at its element

# Hassium 1

## SURFACE MOUNT (SM)



### FEATURES:

- Ceiling or wall mounting system
- High transmission frosted lenses with no diode imaging
- No visible fasteners
- Extruded aluminum housing
- Dimmable/Programmable drivers for controllable light output
- High efficacy LEDs with 5 year warranty
- Under 2 steps MacAdams Ellipse Binning
- 11/16" thick machined end caps
- Bi-directional fixture



### PRODUCT SPECIFICATION

**NOTE:** All options *italicized* may increase lead times and/or incur higher costs - please consult factory with questions.

FITTURE TYPE	MOUNTING/ ORIENTATION	NOMINAL LENGTH*	COLOR TEMP	LED DRIVE POWER		VOLTAGE	DRIVER
				DIRECT	INDIRECT*		
<b>Hs1</b>							
Hs1 Hassium 1	SMS Surface Mount - SIDE SMSD Surface Mount - SIDE DIRECT ONLY Surface Mount - TOP	1' 1'-1-3/8" 2' 2'-1-3/8" 3' 3'-1-3/8" 4' 4'-1-3/8" 5' 5'-1-3/8" 6' 6'-1-3/8" 7' 7'-1-3/8" 8' 8'-1-3/8" 12' 12'-1-3/8" CR_ Continuous Run (Specify length in nominal feet)	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	VLO Very Low Output 305 lumens/ft. (4w/ft.) LO Low Output 465 lumens/ft. (6w/ft.) SO Standard Output 605 lumens/ft. (8w/ft.) HO High Output 760 lumens/ft. (10w/ft.) VHO Very High Output 885 lumens/ft. (12w/ft.) CPO Custom Power Output Consult factory	VLO Very Low Output 405 lumens/ft. (4w/ft.) LO Low Output 615 lumens/ft. (6w/ft.) SO Standard Output 805 lumens/ft. (8w/ft.) HO High Output 1,005 lumens/ft. (10w/ft.) VHO Very High Output 1,170 lumens/ft. (12w/ft.) CPO Custom Power Output Consult factory	UNV Universal (120-277V)	ND Non-Dimming 0-10V DIMMING 10D 10% DIM 1D 1% DIM LUTRON LDE1 Lutron EcoSystem 1% "Soft on" (Digital) LDES Lutron EcoSystem 5% 5-Series (Digital) DALI DALI Digital Addressable Lighting Interface

\*Dimensions are for reference only. Contact factory for more specific information or shop drawings.  
\*\*Odd lengths may incur slightly higher per foot pricing.

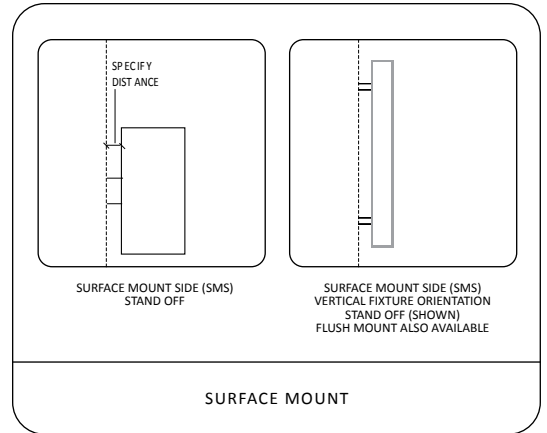
\*Not Applicable with SMT option.

HOUSING FINISH	END CAP FINISH	STAND OFF DISTANCE	OPTIONS/ CUSTOMIZATION*
SC Satin Clear Anodize (Standard) SW Satin White (Powder Coat) MB Matte Black (Powder Coat) CF Custom Finish* (Consult Factory)	MF Machined Finish (Standard) CF Custom Finish (Consult Factory)	0 Flush .5 Half inch 1 1" 3 3" 6 6 CU_ Custom - Specify in inches (IE: CU4.5)	XX No EMB or Customization EMB7 7 Watt battery back-up** (Approximately 600 lumens) EMB12 12 Watt battery back-up** (Approximately 1,000 lumens) 90 90+ CRI LED BOARDS CCP Corners/patterns* CD Custom Driver* CR Customization Requested* WSE Enlighted WSW Wavelinx
CF			

NOTE: MF option is strongly recommended. Other options will result in higher costs and potentially longer lead times.

\*RAL and color match are available.

NOTE: Customization may incur higher costs and/or increased lead times.  
\*Consult the factory for all custom options or custom concept requests.  
\*\*The EMB12 is more expensive than the EMB7 option (BOTH OPTIONS ARE INTEGRAL ONLY).



### SPECIFICATION INFORMATION

**NOTE:** All options *italicized in gray* may increase lead times and/or incur higher costs- please consult factory with questions.

#### GENERAL NOTES:

All fixtures are **UL listed** for **dry** and **damp** locations.  
**INTEGRAL DRIVER** for all options.  
Please contact the factory with any specification questions.

#### DRIVER: [INTEGRAL]

- 1) NON-DIMMING: As described... this fixture will not dim.
- 2) DIMMING: 0-10v: 1%, 10% :: Lutron: 2-wire Forward phase (Hi-Lume 1%), Ecosystem to 1% (Soft On), Ecosystem to 5% (5 Series). "DALI"- Specify driver. See "Dimming Options" on subsequent pages for more information. For other dimming options, consult the factory.
- 3) EMERGENCY: Specify EMB under the Options/Customization category at the end of the cut sheet along with the desired lumen output (600 or 1,000 lumens - the latter is slightly more costly).
- 4) Drivers are programmed according to our standard lumen packages or to custom watt/lumen package requirements.
- 5) Consult factory with any questions or specification requirements.

#### FINISHES:

The standard finish is a Satin Clear anodized housing with Machine Finished hardware. Machined finish is preferable for machined components (Hardware Detail) - Powder coating these parts may result in additional costs. Consult the factory with any questions about standard or custom finishing options.

#### CUSTOMIZATION:

We have numerous custom options available. However, if there is something unique required for a project, from simple options to complete custom requests, we are more than willing to entertain any creative notions you might have. Just ask.





## PRODUCT SPECIFICATION

- Fixture delivered light potential: 89 Lumens/Watt\*
- Uniform light distribution
- 90+ CRI LED diode options
- Exceptional binning- less than 2 step MacAdams Ellipse
- Minimum 70% initial lumen output at 70,000 hours
- Standard 0-10v dimming to %10
- Lutron, Eldoled, Dali, and other dimming options
- 5 year system warranty

\*Actual fixture efficacy will be dependent on specification. Higher lumens per watt are achieved with lower drive powers. Please contact the factory with questions or for more information.

## LUMEN OUTPUT \*

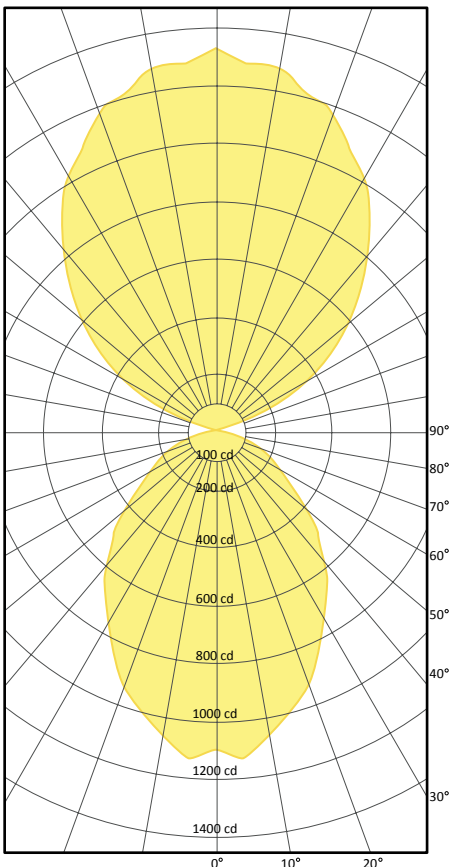
DRIVER OUTPUT	LUMEN OUTPUT (PER FOOT)			
	— DIRECT —		— INDIRECT —	
	WATTAGE	LUMENS	WATTAGE	LUMENS
VERY LOW (VLO)	4	305	4	405
LOW (LO)	6	465	6	615
STANDARD (SO)	8	605	8	805
HIGH (HO)	10	760	10	1,005
VERY HIGH (VHO)	12	885	12	1,170

DRIVER OUTPUT	LUMEN OUTPUT (PER FOOT)			
	— DIRECT —		— INDIRECT —	
	WATTAGE	LUMENS	WATTAGE	LUMENS
VERY LOW (VLO)	16	1,220	16	1,620
LOW (LO)	24	1,860	24	2,460
STANDARD (SO)	32	2,420	32	3,220
HIGH (HO)	40	3,040	40	4,020
VERY HIGH (VHO)	48	3,540	48	4,680

- **VERY LOW:** Considerably underdrives the LEDs to maximize fixture efficacy potential and limit wattage use.
- **LOW:** Underdrives the LEDs for reasonable light output while maintaining low wattage use.
- **STANDARD:** Drives the LEDs for the best combination of lumen output and fixture efficacy.
- **HIGH:** Drive the LEDs at higher capacity for higher lumen output with good efficacy.
- **VERY HIGH:** Drives the LEDs at the highest capacity for the highest lumen output with the best efficacy.

\*Lumen output will vary depending on ambient temperature. Cooler ambient and LED color temperatures result in higher luminaire performance. Calculations are based on 4000K LEDs.

## LUMINOUS INTENSITY DISTRIBUTION



## FIXTURE PROPERTIES (AS TESTED)

- 4' nominal length fixture
- Standard Output (SO)
- Total system energy consumption: 64 Watt
- 89 Lumens/Watt
- 4000K 80 CRI LED

## ZONAL LUMEN SUMMARY

ZONE	LUMEN	%LAMP	%FIXTURE
0 - 30	944	9.2%	14.1%
0 - 40	1,514	14.5%	22.2%
0 - 60	2,554	23.6%	36.1%
0 - 90	3,192	28.1%	43%
90 - 120	821	6.5%	10%
90 - 150	2,657	25.9%	39.8%
90 - 180	3,642	37.2%	57%
0 - 180	6,834	65.3%	100%



# OPTIONS GUIDE

## MOUNTING



### CABLE SUSPENDED (CS)

3/64" aircraft cable suspension system. Hassium 1 (Hs1) can be static down-light and up-light: Bi-Directional (CS) or only static down-light: Direct Only (CSD). Standard and custom power cord finishes, sleeve options, and canopy colors offer options to match almost any space. Stainless steel cables come in various lengths (4' is standard) and are field adjustable.



### SURFACE MOUNT (SM)

Side Mount Side (SMS) or Side Mount Direct Only (SMSD). Side, the fixture is mounted on the wall giving a static bi-directional up-light and down-light. Direct Only, the fixture is mounted on the wall as well but only gives a static down-light. Optional stand-offs allow for fixtures to be mounted from 1/2" to 12" as well as custom lengths if needed.



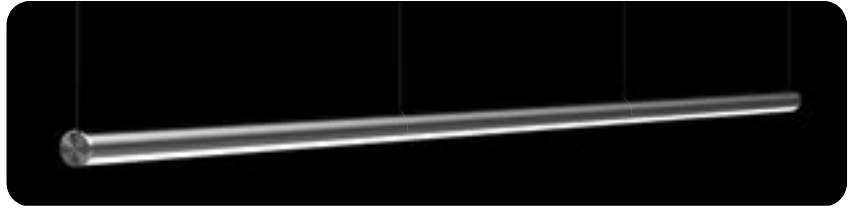
# OPTIONS GUIDE

## CONTINUOUS RUN

Continuous runs are available with all fixtures and have several connection options. Single Seam continuous run options offer smooth section transitions while Component Seams lend to a more dramatic visual statement. The 360 Rotational option enables individual sections to rotate independently of each other, which offers adjustable asymmetric light distribution capacity along with striking appearances such as alternating up/down fixtures or spiral transitions. The flexibility within the rotational option makes for infinite design and functional possibilities.



CONTINUOUS RUN  
SINGLE SEAM



OXYGEN 2 (O2) WITH A SINGLE SEAM CONTINUOUS RUN

## CANOPIES

### STANDARD

Canopies have several standard options to suit various environment aesthetics. The standard cable suspension system has 5" Satin White canopies. However, other standard options include a 2" non-power feed canopy option as well as no canopy at all. Both of these include a 5" diameter power feed canopy.

55



5" diameter power feed and 5" diameter non-pow feed canopy. Most common canopy layout. Creates a consistent ceiling aesthetic.

52



5" diameter power feed and 2" diameter non-power feed canopy. Offers a more minimal ceiling treatment while maintaining the ability to cover up mistakes. Requires a 1/4-20 stud securely fastened to the ceiling.

50

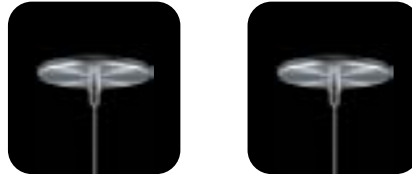


5" diameter power feed canopy and no canopy on the non-power feed side. Minimal aesthetic. Requires a 1/4-20 stud securely attached to ceiling. Works well with continuous runs where the power can be carried inside the fixture.

### MACHINED

Machined canopies are 4" in diameter and can be anodized as well as powder coated to match a desired color or they can be left with a mill finish for a more striking look. Similar non-power feed options are available with this aesthetic as well. These options do carry a higher cost than standard canopies, but also have an impressive appearance.

44



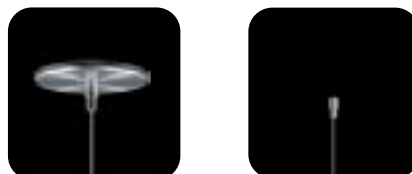
4" diameter machined power feed and 4" diameter machined non-power feed canopy. Offers a consistent ceiling aesthetic with smaller machined canopies. Mill, anodized, and powder coat finishes available.

41



4" diameter machined power feed and 1-1/4" diameter machined non-power feed canopy. Offers minimal ceiling treatment while maintaining the ability to cover mistakes. Requires a 1/4-20 stud securely fastened to the ceiling. Mill, anodized, and powder coat finishes available.

40



4" diameter machined power feed canopy and no canopy on the non-power feed side. Minimal aesthetic. Requires a 1/4-20 stud securely attached to the ceiling. Works well with continuous runs where the power can be carried inside the fixture. Mill, anodized, and powder coat finishes available.

### CUSTOM

Custom canopy options are available and can look spectacular in certain applications. Contact the factory with all custom requests or with any questions.



CUSTOM POWDER COAT



CUSTOM ANODIZE



CUSTOM SHAPE



Lumium Lighting, LLC | 3590 Cadillac Ave, Suite A, Costa Mesa, CA 92626 | Phone: 760.757.2530 | Fax: 760.283.2333 | [www.lumiumlighting.com](http://www.lumiumlighting.com)

While we always strive to ensure all website content and product information is current, Lumium Lighting reserves the right to change specifications without notice.  
© Lumium Lighting, LLC - All rights reserved.



**Lumium**  
lighting at its element

# OPTIONS GUIDE

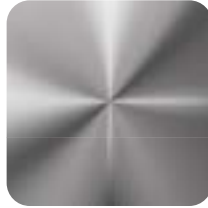
## COLOR AND FINISH

Standard finish configurations are Satin Clear (SC) housing with Machined Finish (MF) machined components (end caps, knuckles, cover plates, etc.). The incredibly clean detail within all of the machined components lends to an incredibly high end aesthetic with two tone finish. Numerous custom anodizing and powder coated finishes are available as well. If you have a particular color/finish treatment in mind, please contact the factory and we will do our best to accommodate your project needs.

### STANDARD



SATIN CLEAR  
ANODIZING



MACHINED  
COMPONENTS

### CUSTOM



MATTE BLACK



GLOSS BLACK



BRONZE



MILL ALUMINUM



SPECULAR



SATIN WHITE



GLOSS WHITE



COLOR POWDER COAT



COLOR ANODIZE



RAL COLORS

### FINISHED CONFIGURATION



THALLIUM 2 (Th2)

Cable Suspended Rotational mount system with two-tone finish, Satin Clear housing and Machined Finish components.

## COVER PLATES

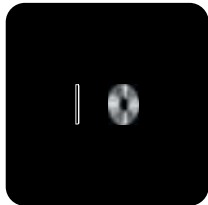
Cover plates are standard for Rotational Arm Mounting (RAM) Systems. Standard options are Flat (FT), Curved (CV), or Trim Ring (TR). With certain applications, cover plates or trim rings may not be necessary. Contact factory with questions or for more information. Custom cover plates are also available. If a certain aesthetic is desired, please contact the factory to review any concepts and we will do our best to bring your vision to life.

### STANDARD



FLAT (CPFT)

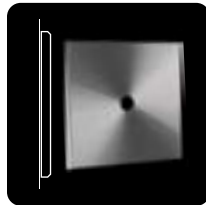
Flat has a 4" diameter cover plate for use with a 3-O mud ring.



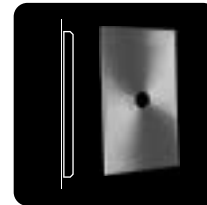
TRIM RING (TR)

1-1/4" diameter trim ring Can be used in applications such as desk mounting.

### CUSTOM



SQUARE



TALL RECTANGLE



CUSTOM

