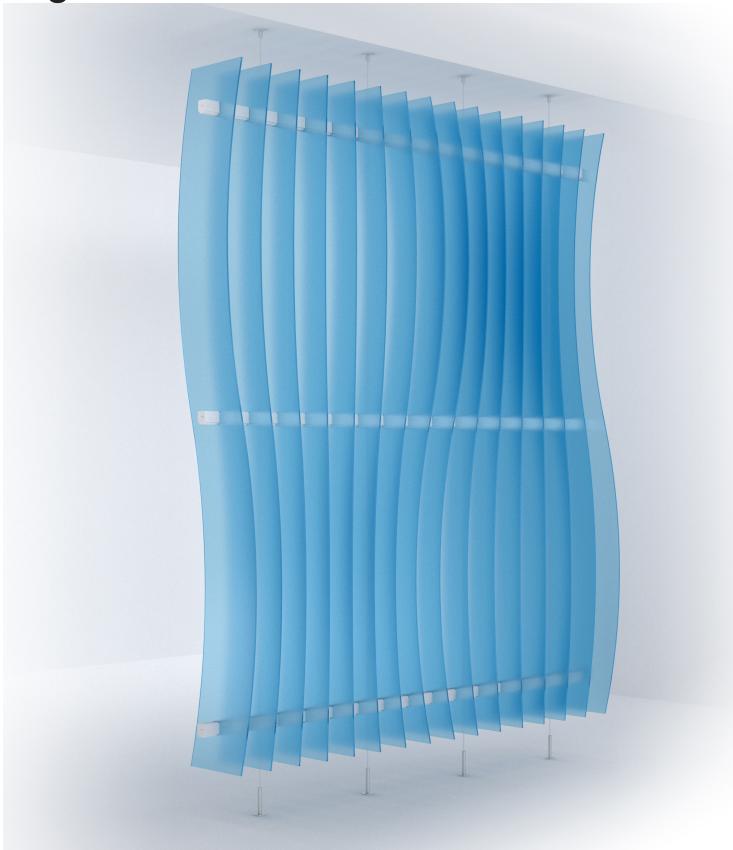
## Edge™

### **Solution Document**





## Edge™

### **Table of Contents**

### 1 Overview

- 1 Product Description and Specifications
- 3 Configurations: Wall and Ceiling
- 5 Configurations: Partitions
- 6 Dimensions

### 7 Installation

- 7 Wall Installation
- 14 Partition Installation
- 22 Ceiling Installation





### **Product Description and Specifications**

Play with Varia in a whole new way with Edge. The easy-to-install, modular system comes in nine configurations, and can be customized to fit any space – as a wall treatment, ceiling element, or partition system.

#### **Features and Benefits**

- · Many beautiful design options
- · Extremely easy to assemble and disassemble
- Very tough and durable

#### **Available Configurations**

Edge Fins come in 9 standard configurations – Uniform, Contour, Fan, Stepped, Angle, Arc, Diagonal, Jagged, Hourglass (shown in more detail on page 3). Fins can be installed in various sequences to provide a unique aesthetic within each configuration. Also, customization of the fin size is available.

Edge is available as a wall, ceiling, or partition installation. Each of the nine fin configurations are identical for wall and ceiling. Partition is two sided so the look is similar on both sides.

### **Available Textures/Finishes**

3form Edge in Varia Ecoresin comes standard with both a front and back Sandstone finish. Sandstone is a durable finish that has a subtle grainy texture with a slightly frosted look.

\*The Varia Ecoresin system panels utilizing natural products as a decorative inter-layers may change in appearance over time. Natural materials are also subject to inherent inconsistency in color, texture and shape.

#### **Available Colors**

Edge Fins can be specified in a variety of color options.

See 3form's Sola Felt colors at:

https://www.3-form.com/materials/sola-felt

#### Flatness Tolerance

Edge panels shall not have distortion in the form of a wrinkle, twist or scallop along the perimeter of the sheet. Overall warp extending across the sheet is permitted to a maximum of  $\%_{32}$ " (7.14 mm) for each 48" (1.2 m) or fraction thereof. Panel is to be measured when laying horizontally under its own weight on a flat continuous surface.

### **Panel Sizes and Tolerances**

Linear patterns in Varia Ecoresin panels have a skew tolerance of ¼" skew over 48". Panels containing a pattern (Capiz, Timber, etc.) will not match up from piece to piece.

\*Edge materials are cut to a tolerance of  $\pm \frac{1}{32}$ "

#### Flammability and Smoke Test Results

- Building Code Approvals

Edges Fins have been independently tested and meet the criteria for approved interior finishes and light transmitting resin as described in the 2015 International Building Code®.

Material	Test	Edge	Result
Varia Ecoresin	ASTM D 2843 Smoke Density	71.6%F	Pass < 75%F
Varia Ecoresin	ASTM D 635 Flame Spread	Self Extinguishing	Pass CC1
Varia Ecoresin	ASTM D 1929 Self-ignition	716%F	Pass > 650%F
Varia Ecoresin	UL94	Flame Class - HB	Pass
Varia Ecoresin	UPITT Mortality Test	Pass	Not more toxic than wood
Varia Ecoresin	ASTM E84-03 Flame Spread, 1/4" thickness Smoke Generated	65 425	Class B: 26-75 ≤450
Varia Ecoresin	NFPA 286 1/4" thickness	Pass	Pass
Sola Felt	ASTM E84-03 Flame Spread, 1/4" thickness Smoke Generated	10 55	Class A: 0-25 ≤450

### **Acoustic Rating**

Material	NRC	SAA	Alpha-W
Varia Ecoresin	N/A	N/A	N/A
Sola Felt	0.55	0.58	.060

### **Panel Weight**

Material	Thickness	Weight Flux	
Varia Ecoresin	1/4" (6.3mm)	1.7 lb/ft² (8.3 kg/m²)	
Sola Felt	1/4" (6.3mm)	0.3 lb/ft² (1.46 kg/m²)	



### Product Description and Specifications cont...

### **Usage Limitations**

**Do not** use cyanoacrylate or solvent type thread locking materials with Varia Ecoresin. To more permanently secure hardware, use the recommended products from the 3form Adhesives Matrix.

#### **Edge Sealing (Varia Ecoresin Only)**

Certain Varia Ecoresin designed layers (organics, papers and fabrics in particular) can wick moisture over time if the edges become wet and are not adequately sealed. These Varia Ecoresin products should not be exposed to water or wet conditions without first applying an approved edge sealing treatment.

#### Cleaning: Varia Ecoresin

3form Varia Ecoresin fins should be cleaned periodically. A regular, seasonal cleaning program will dramatically help prevent noticeable weathering and dirt build-up. 3form recommends the use of the following common cleaning products: Windex, Formula 409, Simple Green, Fantastik, Virex, 10:1 Water/Bleach Solution.

Rinse the sheets with lukewarm water. Remove dust and dirt from Varia Ecoresin with a soft cloth or sponge and a solution of mild soap and/or liquid detergent in water. A 50:50 solution of isopropyl alcohol and water also works well. Rinse thoroughly with lukewarm water.

#### Do:

 Always use a soft, damp cloth to blot dry. (Rubbing with a dry cloth can scratch the material and create a static charge)

#### Do not:

- Use scrapers or squeegees on Varia Ecoresin.
- Use scouring compounds, gasoline, benzene, acetone, carbon tetrachloride, certain deicing fluids, lacquer thinner or other strong solvents.
- Use highly alkaline or abrasive cleaning agents.
- · Rub with a dry cloth.

#### Cleaning: Felt

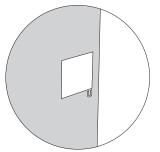
To remove airborne debris and dust, it is recommended to periodically vacuum Felt Edge fins. Please note the slight shedding of fibers from the Felt is normal and not indicative of any defect.

Important! If a cleaning material is found to be incompatible in a short-term test, it will usually be found to be incompatible in the field. The converse, however, is not always true. Favorable performance is no guarantee that actual end-use conditions have been duplicated. Therefore, these results should be used as a guide only and it is recommended that the user test the products under actual end use conditions.



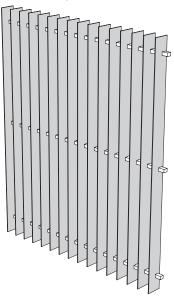
## Configurations: Wall and Ceiling

Each configuration shows two (2) Ready To Go solutions with a resulting footprint of 84" wide  $\times$  96" high. These are made from two(2) side by side modules, each 42" wide  $\times$  96" tall.

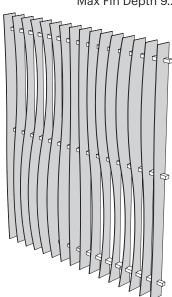


Number Location on Fins (Top Rail Slot)

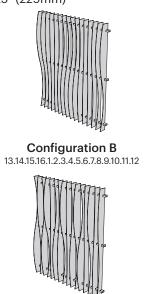
Edge Uniform (Wall and Ceiling)
Max Fin Depth 6.25" (159mm)



Contour (Wall and Ceiling)
Max Fin Depth 9.25" (229mm)



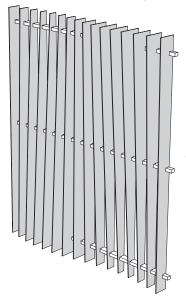
**Configuration A** 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16



**Configuration C** 4.15.3.12.1.6.7.13.16.2.14.5.9.11.8.10

#### Fan (Wall and Ceiling)

Max Fin Depth 9.25" (229mm)



**Configuration A** 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16



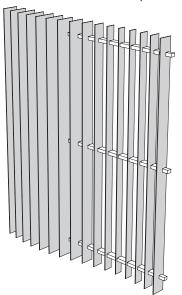
**Configuration B** 13.14.15.16.1.2.3.4.5.6.7.8.9.10.11.12



**Configuration C** 4.15.3.12.1.6.7.13.16.2.14.5.9.11.8.10

### Stepped (Wall and Ceiling)

Max Fin Depth 6.25" (159mm)



**Configuration A** 4.3.2.1.1.2.3.4.5.6.7.8.8.7.6.5.



Configuration B 1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1.



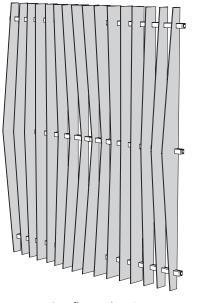
**Configuration C** 8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8.



## Configurations: Wall and Ceiling cont...

Each configuration shows two (2) Ready To Go solutions with a resulting footprint of 84" wide  $\times$  96" high. These are made from two(2) side by side modules, each 42" wide  $\times$  96" tall.

Angle (Wall and Ceiling)
Max Fin Depth 9.25" (229mm)

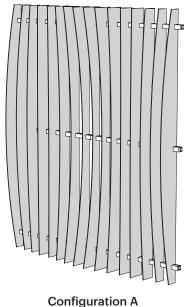


Configuration A 8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8.



Configuration B 1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1.

## Arc (Wall and Ceiling) Max Fin Depth 9.25" (229mm)



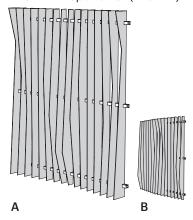
Configuration A 8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8.



Configuration B 1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1.

#### Diagonal (Wall and Ceiling)

Max Fin Depth 9.25" (229mm)

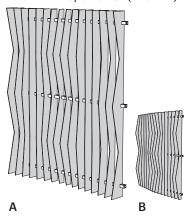


**Configuration A** 1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1

**Configuration B** 8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8

#### Jagged (Wall and Ceiling)

Max Fin Depth 9.25" (229mm)

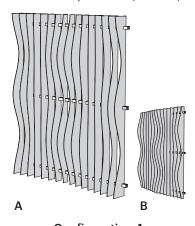


Configuration A 1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1

**Configuration B** 8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8

### Hourglass (Wall and Ceiling)

Max Fin Depth 9.25" (229mm)



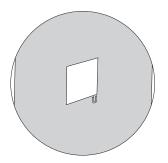
**Configuration A** 1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1

Configuration B 8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8

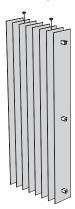


## Configuration: Partition

Designed to look the same as the edge wall and ceiling, but in a two-sided format. Please visit our website for more views of Edge Partition. \*Some images below show 2 modules/kits rather than just one in order to show the pattern detail better.



Number Location on Fins (Top Rail Slot)



Edge Uniform (Partition)
Max Fin Depth 12" (305mm)
U.U.U.U.U.U.U.U.



Contour (Partition) Max Fin Depth 16.5" (420mm) 1.2.3.4.5.6.7.8



Fan (Partition)
Max Fin Depth 16.5" (420mm)
1.2.3.4.5.6.7.8



Stepped (Partition) Max Fin Depth 12" (305mm) 1.2.3.4.5.6.7.8



Angle (Partition)\*
Max Fin Depth 16.5" (420mm)
8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8



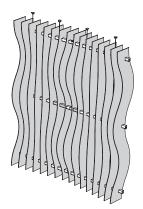
Arc (Partition)\*
Max Fin Depth 16.5" (420mm)
8.7.6.5.4.3.2.1.1.2.3.4.5.6.7.8



Diagonal (Partition)\*
Max Fin Depth 16.5" (420mm)
1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1



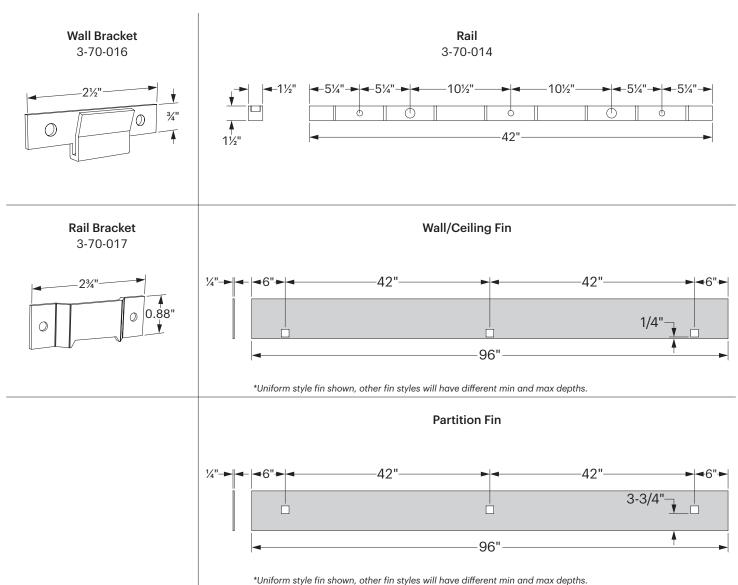
Jagged (Partition)\*
Max Fin Depth 16.5" (420mm)
12.3.4.5.6.7.8.8.7.6.5.4.3.2.1



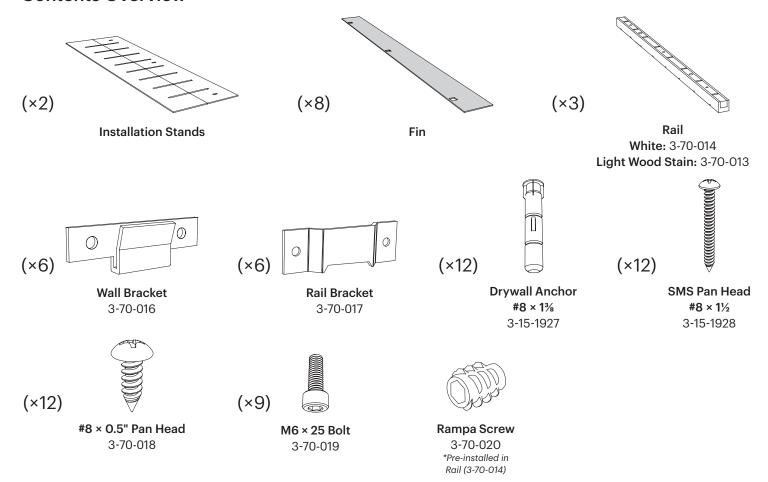
Hourglass (Partition)\*
Max Fin Depth 16.5" (420mm)
1.2.3.4.5.6.7.8.8.7.6.5.4.3.2.1

## Edge™

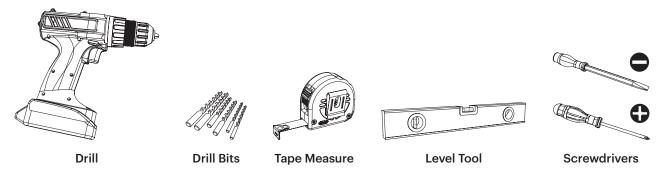
### **Dimensions**



### **Contents Overview**

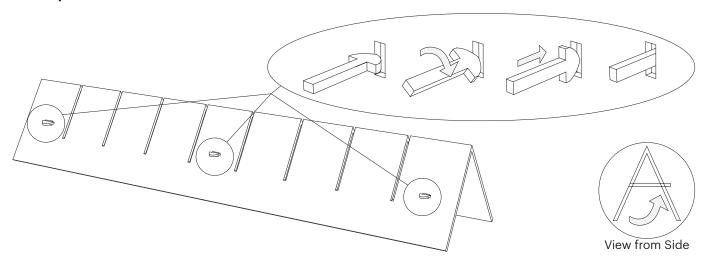


### **Required Tools**



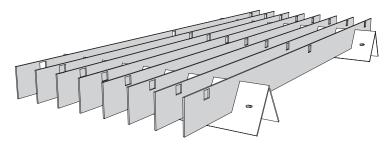


1 Set Up Installation Stands



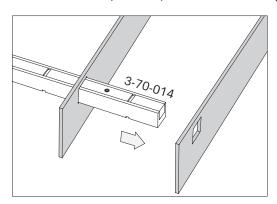
# 2 Install Edge Fins into Installation Stands

Follow proper fin numbering sequence as noted on pages 3-4.

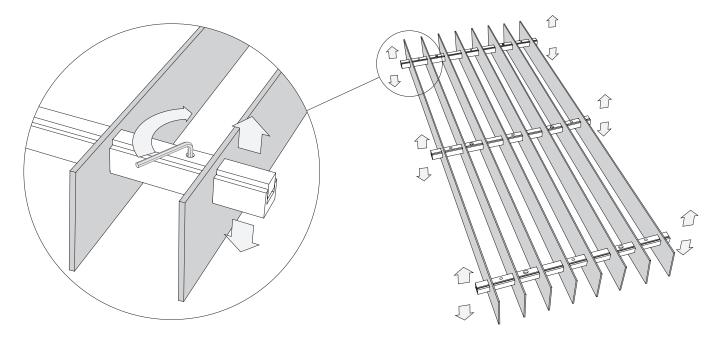


## 3 Insert Rails into the Fins

Insert the rails into the fins as shown. Then install bolts (3-70-019) into the rails in the pre-installed rampa inserts.

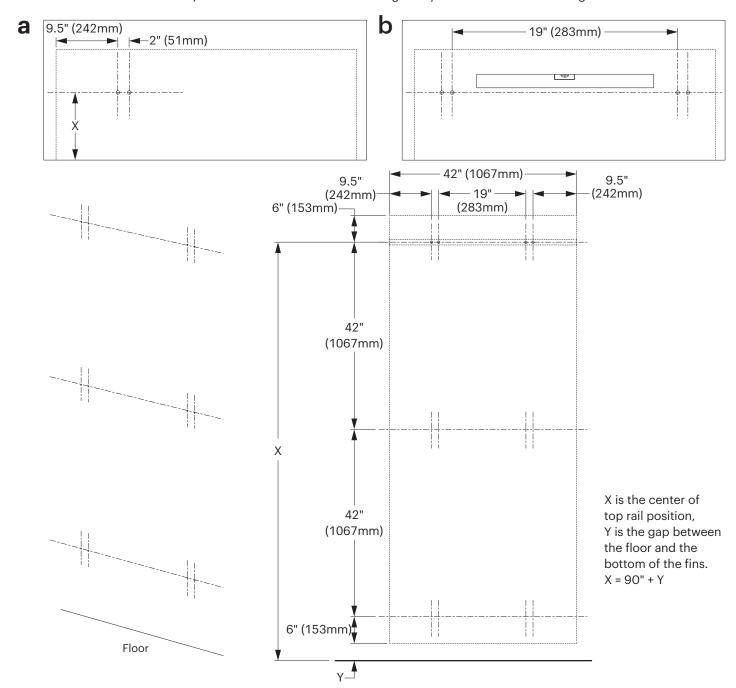


# 4 Expand Rails to Lock Fins in Slots

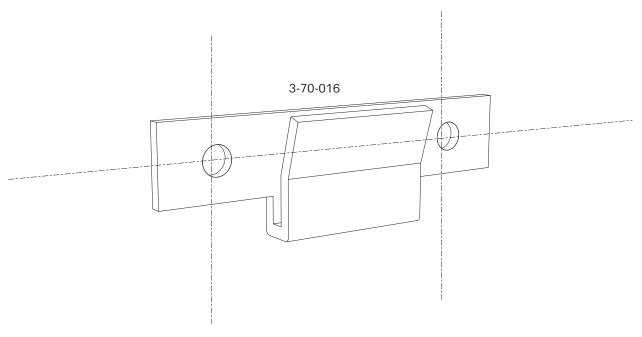


## 5 Mark Walls for Wall Bracket Installation

When installing models end to end (meaning the ends of the fins are lining up) 3form recommends to leave a  $\frac{1}{2}$ " - 1" gap between modules to avoid any aesthetic variation due to the fins not perfectly aligning caused by material or installation variance. The wall also may need to be leveled before installing the systems so that modules align one to the other.

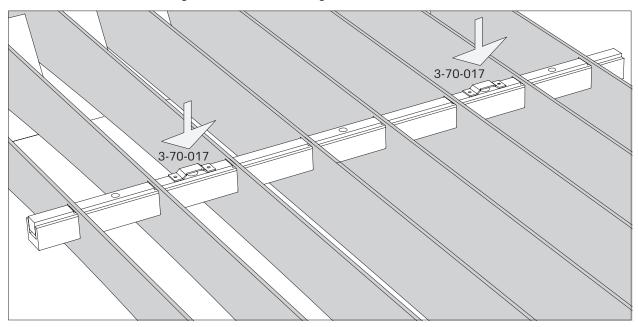


## 6 Attach Wall Brackets to Wall Using Marks

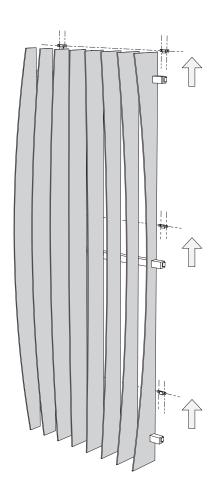


## 7 Attach Rail Brackets to Back of Edge Rail

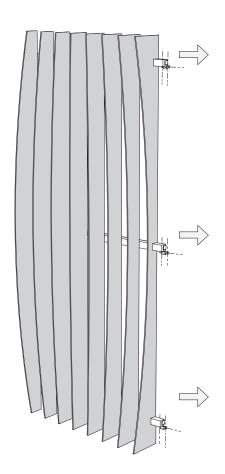
Center Rail Brackets around largest holes on back of edge rail



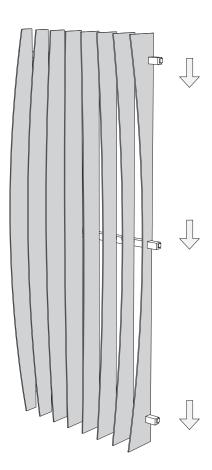
## 8 Hang Edge Fins onto Wall



Position fins in front of wall to be installed



Lift upwards above brackets, and then push backwards until there is contact with the wall.



Carefully let the fins down making sure that all of the rail clips engage with the wall clips.

## **9** How to Shorten a Section of Edge Walls

When less than the full width of Edge (<42") is needed, you must cut down the rails of the edge product. Follow the instructions below for best results.

**a** Determine the number of fins needed (or your maximum length). See chart below.

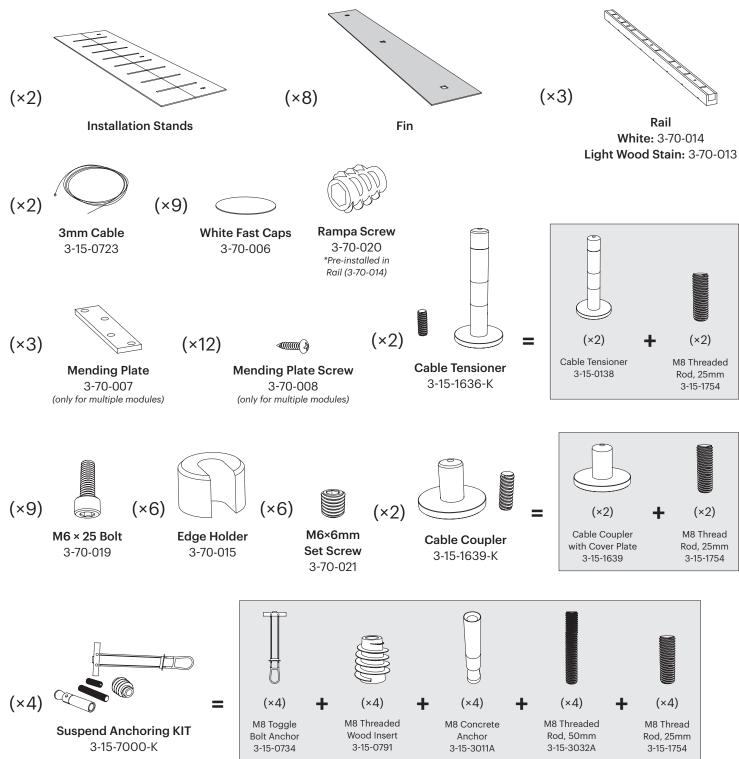
# of Fins	Distance	
1*	5 ¼"	
2*	10 ½"	
3*	15 ¾"	
4*	21"	
5	26 ¼"	
6	31 ½"	
7	36 ¾"	
8	42"	

\*For rails with less than 4 fins, you must drill a new counter-bored hole and through hole for the Rampa insert for expanding the rails.

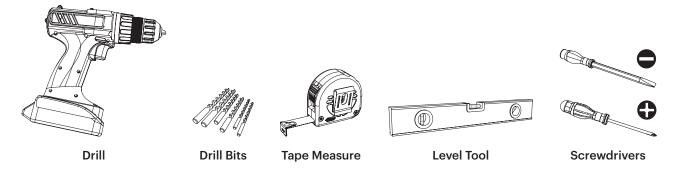
- First counter-bore with a ½" diameter brad point drill bit to a depth of ¾" (9.5mm)
- Next drill all the way through with a ¼" diameter brad point drill bit

- If you are mounting next to another assembly of Edge, its important to identify the side of the rails that will meet up with the existing fins. When you cut the rail, it will leave exposed wood, so this will need to be mounted against the existing system. If you are NOT mounting adjacent to another system, you will need to paint the side of the rail that is cut.
- Mark your rail for your desired cut. See dimensions in Step 9a, based on the number of Fins you want.
- d Install modified rail, with cut side facing existing Edge system.

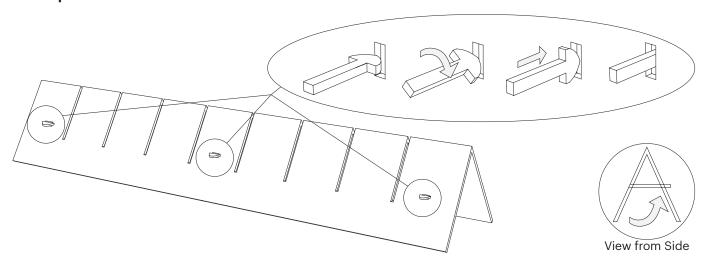
#### **Contents Overview**



### **Required Tools**

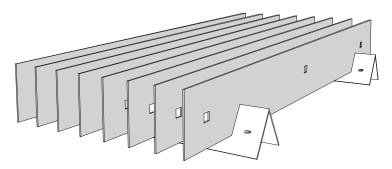


## 1 Set Up Installation Stands



## 2 Install Edge Fins into Installation Stands

Follow proper fin numbering sequence as noted on page 5.



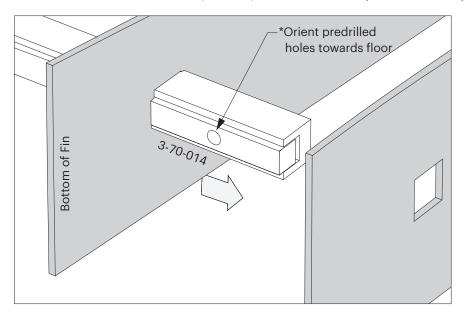
## 3 Drill Cable Holes in Rails

Drill  $\frac{1}{8}$ " holes through "C" shaped rails to hang the rails with cables.

## 4

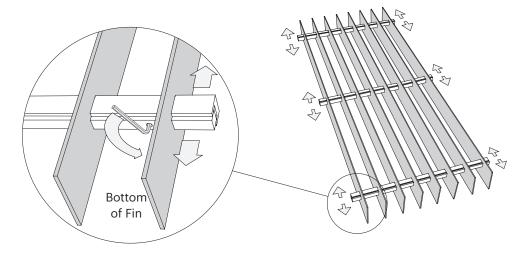
### **Insert Rails into the Fins**

Insert the rails into the fins as shown. Then install bolts (3-70-019) into the rails in the pre-installed rampa inserts.



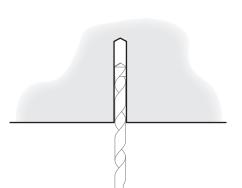
## **5** Expand Rails to Lock Fins in Slots

After completing installation, the fast caps (3-70-006) can be used to cover up the bolts.



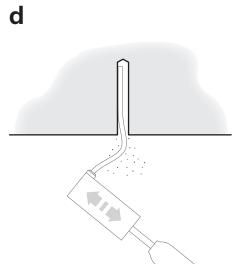
- 6 Cable Couplers and Tensioners Position and Installation
  - When installing models end to end (meaning the ends of the fins are lining up) 3form recommends to leave a ½" 1" gap between modules to avoid any aesthetic variation due to the fins not perfectly aligning caused by material or installation variance.
  - **b** Determine position for anchoring.

\*If anchoring in concrete follow Steps 6c-h, if anchoring in wood follow Steps 6i-j. Then continue with Steps 6k-p.

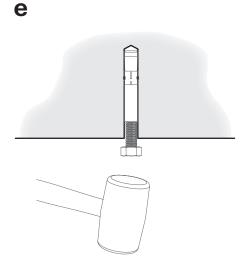


Concrete Installation

Drill Ø10mm hole, minimum 65mm deep.



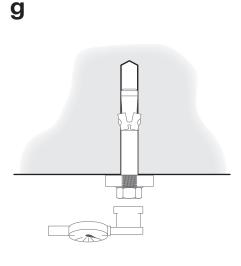
Remove drilling debris with a blowout bulb or with compressed air.

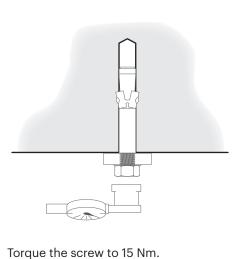


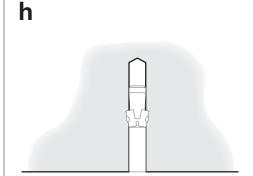
With screw in anchor (3-15-3011A), use a hammer to insert anchor.

Cable Couplers and Tensioners Position and Installation cont...

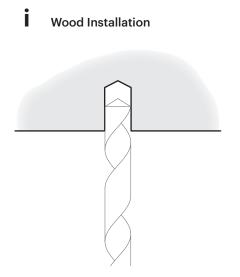
Place a washer under the screw head.



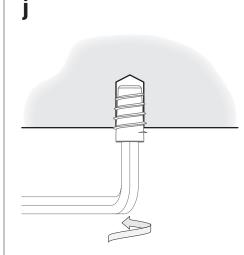




Remove screw.

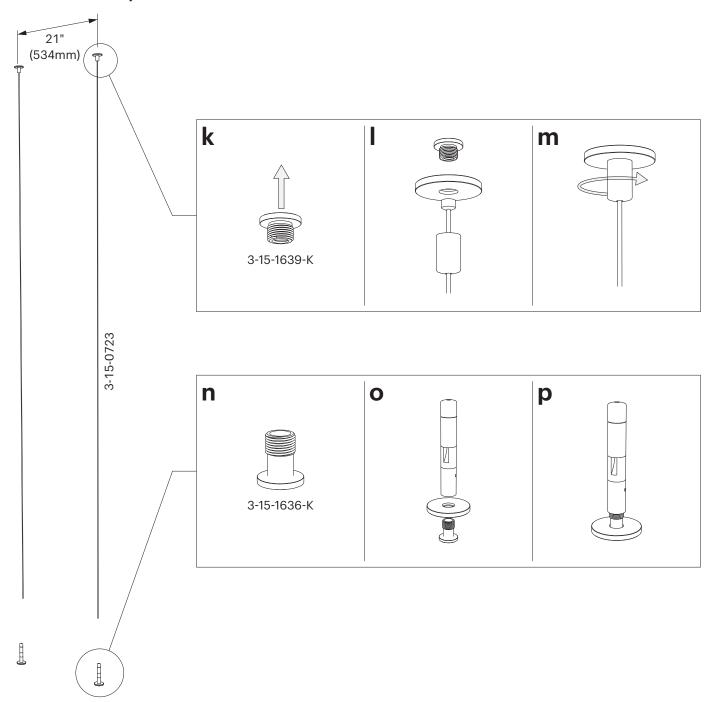


Drill Ø1/16" (Ø11.1mm) hole, minimum 20mm deep.



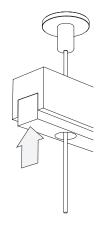
Use an Allen wrench to install the M8 Threaded Insert (3-15-0791).

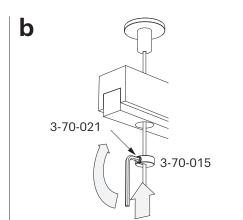
**6** Cable Couplers and Tensioners Position and Installation *cont...* 

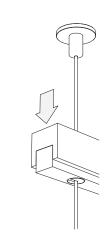


**7** Suspend Edge Module

a

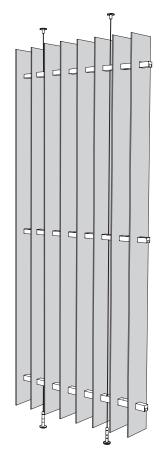


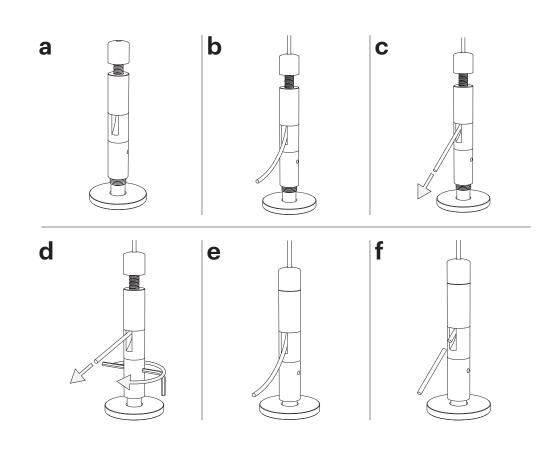




C

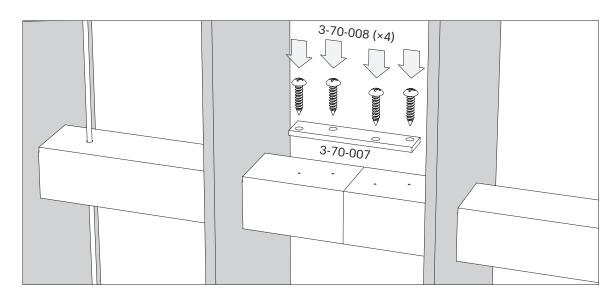
8 Cable Tensioner installation

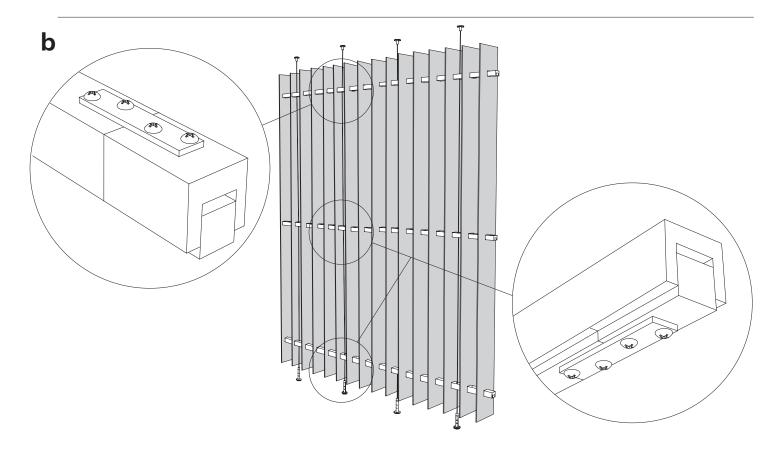




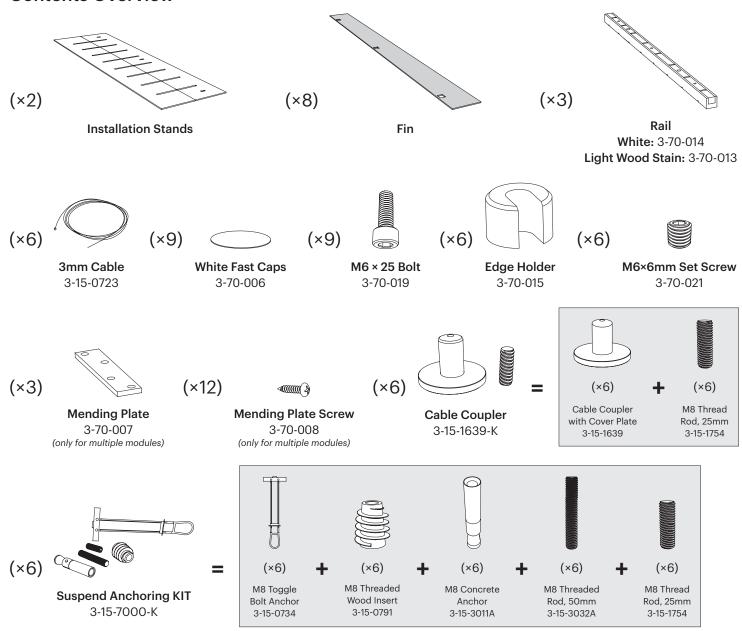
9 Connect Edge Module - Optional

a





#### **Contents Overview**



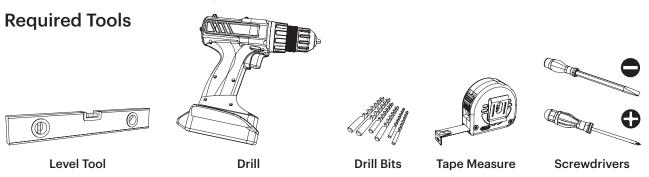


Rampa Screw 3-70-020 \*Pre-installed in Rail (3-70-014)

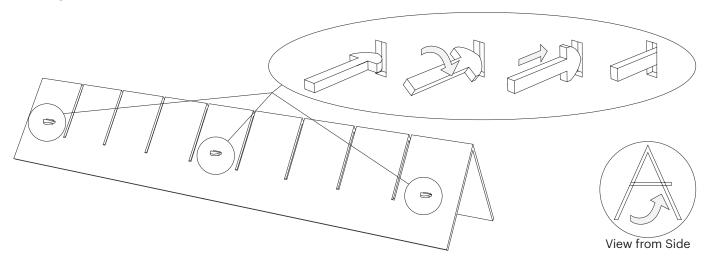


## Edge™

## Installation: Ceiling

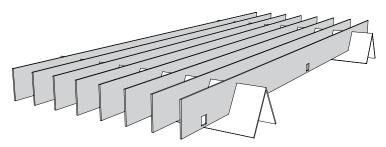


## 1 Set Up Installation Stands



## **2** Install Edge Fins into Installation Stands

Follow proper fin numbering sequence as noted on pages 3-4.

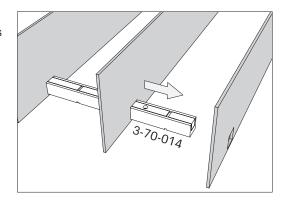


## 3 Drill Cable Holes in Rails

Drill 1/4" holes through "C" shaped rails to hang the rails with cables.

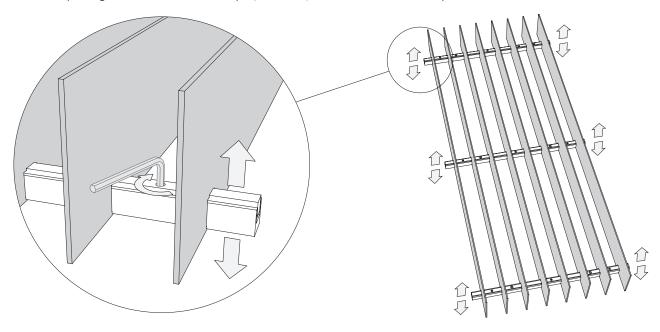
## 4 Insert Rails into the Fins

Insert the rails into the fins as shown. Then install bolts (3-70-019) into the rails in the pre-installed rampa inserts.



## **5** Expand Rails to Lock Fins in Slots

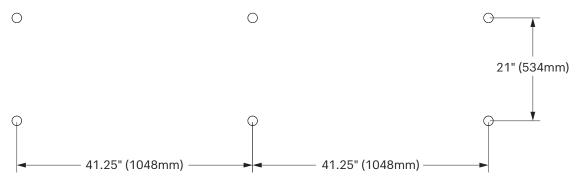
After completing installation, the fast caps (3-70-006) can be used to cover up the bolts.



## 6 Cable Couplers Position and Installation

When installing models end to end (meaning the ends of the fins are lining up) 3form recommends to leave a ½" - 1" gap between modules to avoid any aesthetic variation due to the fins not perfectly aligning caused by material or installation variance.

**b** Determine position for anchoring.

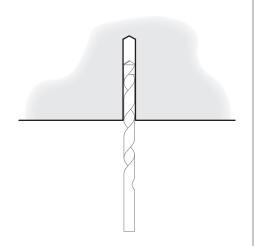




**6** Cable Couplers Position and Installation cont...

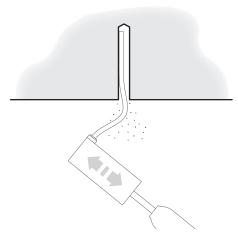
\*If anchoring in concrete follow Steps 6c-h, if anchoring in a hollow substrate follow steps 6i-n, if anchoring in wood follow Steps 5o-p. Then move on to Steps 6q-s.





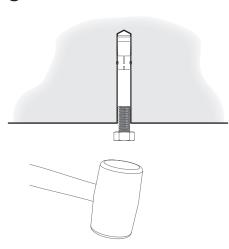
Drill Ø10mm hole, minimum 65mm deep.





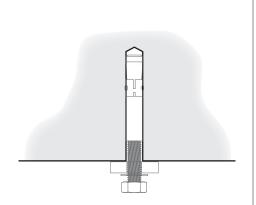
Remove drilling debris with a blowout bulb or with compressed air.

e



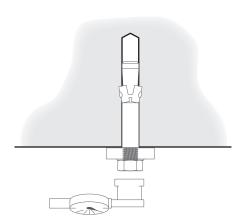
With screw in anchor (3-15-3011A), use a hammer to insert anchor.





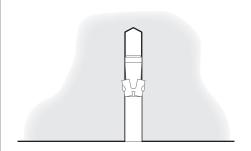
Place a washer under the screw head.

g



Torque the screw to 15 Nm.

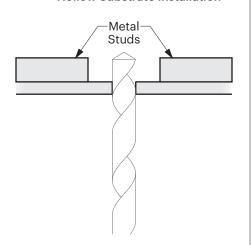
#### h



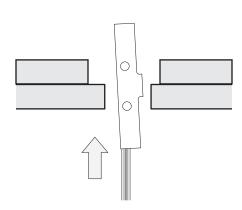
Remove screw.

## Cable Couplers Position and Installation cont...



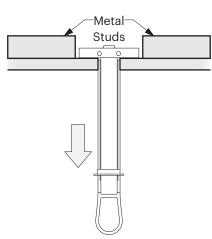


Drill ؾ" (19mm) hole. Minimum clearance behind wall = 1%" (48mm)

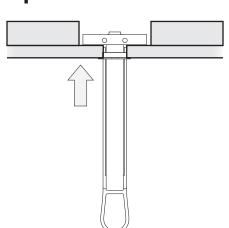


Position the metal channel parallel with the plastic legs. Insert the metal channel through the drilled hole into the wall cavity.

### k

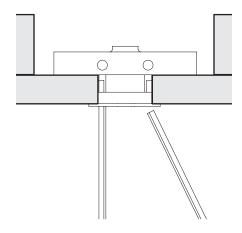


Pull the metal channel firmly against the inner wall cavity by tugging the plastic pull ring.



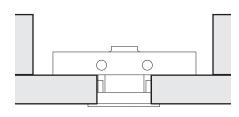
Slide the plastic cap forward along the legs until it is seated flush to the work surface.

### m



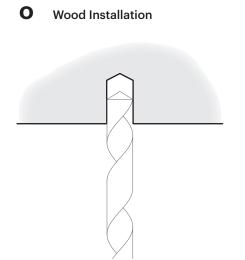
Snap the plastic legs off flush at the plastic cap by pushing outward.

#### n

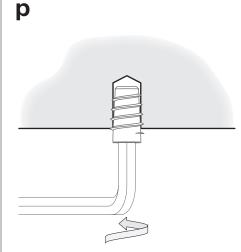


Note: Maximum torque on screw or rod is 5 ft-lb.

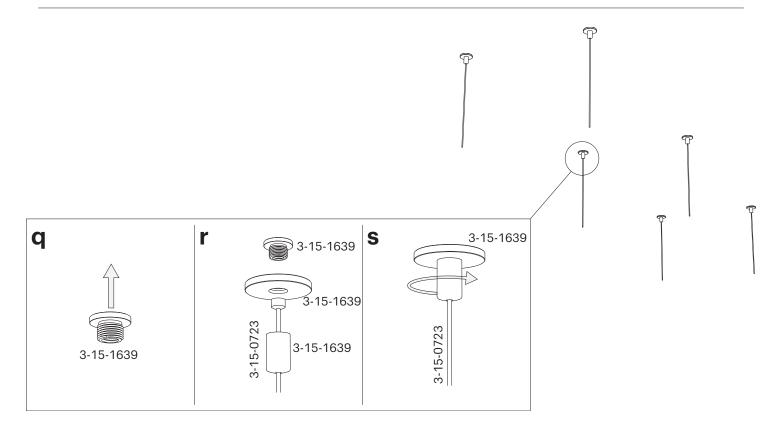
**6** Cable Couplers Position and Installation cont...



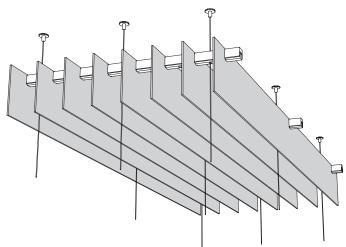
Drill  $\emptyset\%$ " (Ø11.1mm) hole, minimum 20mm deep.

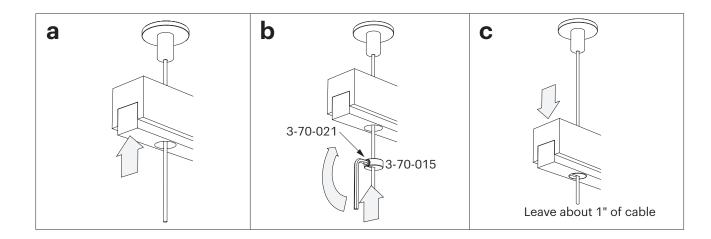


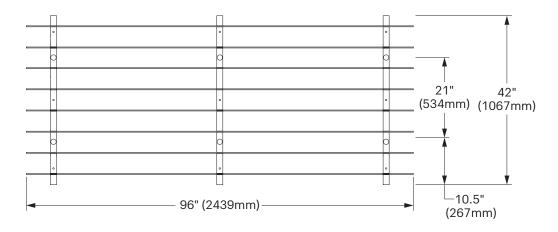
Use an Allen wrench to install the M8 Threaded Insert (3-15-0791).



## **7** Suspend the Edge Module









8 Connect the Edge Module - Optional

