Create fluid motion and dynamic presence with 3form Shapes and Twists. Design intimate or expansive installations with formed panels matching edge-to-edge using four separate Continuous Patterns. For a more artfully arranged installation, use any combination of our six Sculptural Forms or infinite combinations of Twists. Shapes, Twists, and their compatible hardware have limitless compositional possibilities.
Shapes™ Solution Document

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General Overview

Thirty-eight shapes are available. These are presented below as Sculptural Forms, Continuous Pattern Shapes, and Twists. The key differentiation being that Continuous Patterns are “linkable” Shapes that have been modeled and designed to edge match with one another while Sculptural Forms and Twists are unique.

Continuous Patterns

- **Flow A**  
  page 4
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- **ZigZag**  
  page 6
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- **Elevate**  
  page 8
- **X Shape**  
  page 8
- **Curve**  
  page 9

When Continuous Pattern will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the shape. If you want to use a Continuous Pattern Shape but not in a continuous installation (e.g. randomly placed), you can use only 4 points of attachment, and therefore the shapes should be specified with 4 holes. When specifying your Continuous Pattern Shapes, please designate whether you want 6 points of attachment (6 holes) or 4 points of attachment (4 holes), and what type of hardware you will be using so the appropriate hole type is used. No holes for these Shapes is the default due to various potential installation conditions. As well, due to nature of Swell shapes which can be used with a variety of systems; holes will not be drilled by default, but can be specified.
General Overview

Sculptural Forms

Symphony  pages 10 - 11

Allegro  Adagio  Legato  Forte  Vivace  Coda

Alta 3S  page 12

A  B  C

Alta 2M  page 13

A  B

Solitude LS  page 15

L  S

Solitude 2M  page 16

A  B

Plane  page 17

L  M  S

Sails  page 18

12"

Crimp  page 19

16"

24"

Parasol  page 20

Twists  page 21

15°  75°  135°  195°
Additionally, there are several hardware options to choose from:

- Bottom Release Gripper (page 23)
- Variable Angle Standoff (page 24)
- Angled Standoff Adapter (page 25)
- Point Support (page 30)
- Hidden Point Support (smooth collection) (page 26)
- Surface Bracket (smooth collection) (page 26)
- Angled Standoff Adapter (page 25)
- Cable Loop (page 27)
- Twist Insert (curve collection) (page 28)
- Top Gripper (t & b) (smooth collection) (page 26)
- Top Gripper (t & b) (smooth collection) (page 26)
- Top Gripper (smooth collection) (page 26)
- Top Gripper (curve collection) (page 26)
- Top Gripper (smooth collection) (page 26)
- Top Gripper (curve collection) (page 26)
- Suspend Hardware (smooth collection) (page 29)
- Suspend Hardware (curve collection) (page 29)
- Suspend Swivel Connector (curve collection) (page 29)
- Versa Brackets (page 31)
- Versa Spider (page 31)
- Sputnik* (page 32)
- Mini Ball Gripper with Safety Nut* (page 32)

*Only available for use with Parasol Shapes

You may select the rod and Variable Angle Standoff or the Bottom Release Gripper w/cable option for any suspended Shape. Also, the Flow A and Flow B Shapes may be used with an Adapted Standoff washer to allow it to be installed vertically off a wall, and lastly, the straight vertical edges of ZigZag, Swell, Elevate and X-Shape allow them to be used with our standard vertical installation.
Continuous Patterns - *Flow*

General Information
- Gauge: 3/8"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: No

Hardware Available:
- **Wall:** standard Angled Standoff Adapter
  - works in conjunction with Point Support using 6" barrels and wall flange.
- **Ceiling:** standard Variable Angle Standoff
  - standard Bottom Release Gripper
  - Suspend Swivel Connector (curve collection)

Additional Info:
Due to variety of installation options no holes is default with Continuous Pattern. When Continuous Pattern Shapes will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the Shape.
Continuous Patterns - Valley

General Information
- Gauge: 3/8"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: No

Hardware Available:
- Ceiling: Variable Angle Standoff, Bottom Release Gripper, Suspend Swivel Connector (curve collection)

Additional Info:
Due to variety of installation options no holes is default with Continuous Pattern. When Continuous Pattern Shapes will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the Shape.
Continuous Patterns - *ZigZag*

**General Information**

- **Gauge:** 3/8”
- **Finish available:** Sandstone or Patent
- **Holes drilled at 3form by default:** No

**Hardware Available:**

<table>
<thead>
<tr>
<th>Wall</th>
<th>Ceiling</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Bottom Release Gripper (smooth collection)</td>
<td>Standard</td>
</tr>
<tr>
<td>Hidden Point</td>
<td>Cable Loop (curve collection)</td>
<td>Versa Spider</td>
</tr>
<tr>
<td>Standard</td>
<td>Suspend Hardware (smooth collection)</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>Top Gripper (t &amp; b) (smooth collection)</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>Suspend Hardware (curve collection)</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>Top Gripper (t &amp; b) (curve collection)</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Info:**

Due to variety of installation options no holes is default with Continuous Pattern. When Continuous Pattern Shapes will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the Shape.

For more information, please visit 3-form.com or call 800.726.0126

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Continuous Patterns - Swell

General Information
- Gauge: 3/8"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: No

Hardware Available:

<table>
<thead>
<tr>
<th>Wall:</th>
<th>Ceiling:</th>
<th>Floor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>standard</td>
<td>Bottom Release Gripper</td>
<td>standard</td>
</tr>
<tr>
<td>Point Support</td>
<td></td>
<td>Versa Spider</td>
</tr>
<tr>
<td>Hidden Point</td>
<td>Variable Angle Standoff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Top Gripper (t &amp; b) (smooth collection)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suspend Hardware (smooth collection)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Top Gripper (t &amp; b) (curve collection)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suspend Hardware (curve collection)</td>
<td></td>
</tr>
</tbody>
</table>

Additional Info:
Due to variety of installation options no holes is default with Continuous Pattern. When Continuous Pattern Shapes will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the Shape.
Continuous Patterns - *Elevate and X Shape*

---

**General Information**
- Gauge: 3/8"  
- Finish available: Sandstone or Patent  
- Holes drilled at 3form by default: No

**Hardware Available:**

- **Wall:** standard  
  - Point Support  
  - Hidden Point

- **Ceiling:** standard  
  - Bottom Release Gripper  
  - Variable Angle Standoff  
  - Suspend Hardware (smooth collection)

- **Floor:** standard  
  - Top Gripper (t & b) (smooth collection)  
  - Top Gripper (t & b) (curve collection)  
  - Versa Spider  
  - Versa Brackets

**Additional Info:**
Due to variety of installation options no holes is default with Continuous Pattern. When Continuous Pattern Shapes will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the Shape.
Continuous Patterns - Curve

Curve 4' × 8'

Curve 4' × 10'

General Information

Gauge: 3/8”
Finish available: Sandstone or Patent
Holes drilled at 3form by default: No

Hardware Available:

Ceiling:
- Bottom Release Gripper
- Suspend Hardware (smooth collection)
- Variable Angle Standoff
- Suspend Hardware (curve collection)
- Top Gripper (t & b) (smooth collection)
- Top Gripper (t & b) (curve collection)
- Cable Loop

Additional Info:

Due to variety of installation options no holes is default with Continuous Pattern. When Continuous Pattern Shapes will be used to match side-by-side, 6 points of attachment must be used to prevent any deflection in the Shape.
Sculptural Forms - *Symphony*

**Allegro**
- Front Side: 90°
- Back Side: 18°
- Height: 32''

**Adagio**
- Front Side: 92°
- Back Side: 18°
- Height: 35''

**Forte**
- Front Side: 89°
- Back Side: 16°
- Height: 47''

**Legato**
- Front Side: 91°
- Back Side: 16°
- Height: 39''

For more information, please visit 3-form.com or call 800.726.0126
Sculptural Forms - *Symphony Cont.*

**Vivace**
- Front Side: 89"
- Back Side: 89"
- Width: 43"
- Depth: 28"

**Coda**
- Front Side: 87"
- Back Side: 87"
- Width: 43"
- Depth: 26"

---

**General Information**
- Gauge: 3/8"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: No

**Hardware Available:**
- Ceiling: standard
- Bottom Release Gripper: standard
- Variable Angle Standoff: standard

---

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Sculptural Forms - *Alta 3S*

**General Information**
- Gauge: 1/4"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: Yes
- Holes size: 1" (for Bottom Release Gripper)

**Hardware Available:**

**Wall:**
- Point Support

**Ceiling:**
- Standard
- Bottom Release Gripper
- Variable Angle Standoff
- Top Gripper (smooth collection)
- Top Gripper (curve collection)

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Sculptural Forms - *Alta 2M*

**General Information**
- Gauge: 1/4”
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: Yes
- Holes size: 1” (for Bottom Release Gripper)

**Hardware Available:**

Wall:  
- Point Support

Ceiling:  
- Standard
- Bottom Release Gripper
- Variable Angle Standoff
- Top Gripper (smooth collection)
- Top Gripper (curve collection)

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Sculptural Forms - *Flag*

**General Information**
- **Gauge:** 1/4”
- **Finish available:** Sandstone or Patent
- **Holes drilled at 3form by default:** Yes
- **Holes size:** 1” (for Bottom Release Gripper)
- **Yield:** 2 Flag Shapes per 4’ x 8’ sheet

**Hardware Available:**
- **Ceiling:**
  - **Standard** Bottom Release Gripper
  - **Variable Angle Standoff**

For more information, please visit 3-form.com or call 800.726.0126
Sculptural Forms - Solitude LS

General Information
- Gauge: 1/4”
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: Yes
- Holes size: 1” (for Bottom Release Gripper)

Hardware Available:
- Wall:
  - Point Support
  - Standard Bottom Release Gripper
  - Variable Angle Standoff
- Ceiling:
  - Top Gripper (smooth collection)
  - Top Gripper (curve collection)

For more information, please visit 3-form.com or call 800.726.0126
Sculptural Forms - *Solitude 2M*

**General Information**
- **Gauge:** 1/4”
- **Finish available:** Sandstone or Patent
- **Holes drilled at 3form by default:** Yes
- **Holes size:** 1” (for Bottom Release Gripper)

**Hardware Available:**
- **Wall:** Leaf Support, Bottom Release Gripper, Variable Angle Standoff
- **Ceiling:** Top Gripper (smooth collection), Top Gripper (curve collection)

For more information, please visit 3-form.com or call 800.726.0126

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Sculptural Forms - *Plane*

**General Information**
- **Gauge:** 5/8”
- **Finish available:** Sandstone or Patent
- **Holes drilled at 3form by default:** No

**Hardware Available:**
- **Wall:** Point Support
- **Ceiling:** Standard Bottom Release Gripper

For more information, please visit 3-form.com or call 800.726.0126

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Sculptural Forms - *Sails*

**General Information**
- Gauge: 3/8"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: No

**Hardware Available:**

<table>
<thead>
<tr>
<th>Wall or Ceiling:</th>
<th>Ceiling:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Surface Bracket (smooth collection)</td>
<td>Standard Thickness Standoff</td>
</tr>
<tr>
<td>Standard Thickness Top Gripper (smooth collection)</td>
<td>Standard Thickness Top Gripper (curve collection)</td>
</tr>
<tr>
<td>Standard Thickness Suspend Hardware (smooth collection)</td>
<td>Standard Thickness Suspend Hardware (curve collection)</td>
</tr>
</tbody>
</table>

For more information, please visit 3-form.com or call 800.726.0126
Sculptural Forms - *Crimp*

- $(12'' \times 3\frac{3}{4}'' \times 33'') \times 2$
- $(12'' \times 5\frac{1}{2}'' \times 58'') \times 2$
- $(12'' \times 5\frac{1}{2}'' \times 96'') \times 2$

**General Information**
- **Gauge**: 1/4”
- **Finish available**: Sandstone or Patent
- **Holes drilled at 3form by default**: No

**Hardware Available:**

<table>
<thead>
<tr>
<th>Wall or Ceiling:</th>
<th>Ceiling:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Bracket (smooth collection)</td>
<td>Standard Top Gripper (smooth collection)</td>
</tr>
<tr>
<td>Standard Surface Bracket (curve collection)</td>
<td>Standard Top Gripper (curve collection)</td>
</tr>
<tr>
<td>Standard Surface Bracket (smooth collection)</td>
<td>Suspend Hardware (smooth collection)</td>
</tr>
<tr>
<td>Standard Surface Bracket (curve collection)</td>
<td>Suspend Hardware (curve collection)</td>
</tr>
</tbody>
</table>

For more information, please visit 3-form.com or call 800.726.0126
Sculptural Forms - *Parasol*

**General Information**
- **Gauge:** 1/4”
- **Finish available:** Sandstone or Patent
- **Holes drilled at 3form by default:** Yes
- **Yield:** 4 Shapes per 4' x 8' sheet

**Hardware Available:**

<table>
<thead>
<tr>
<th>Ceiling:</th>
<th>standard</th>
<th>standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Ball Gripper with Safety Nut</td>
<td>Sputnik</td>
<td></td>
</tr>
</tbody>
</table>

*Note: The Mini Ball Gripper with Safety Nut and Sputnik are only available with the Parasol Shape*

For more information, please visit 3-form.com or call 800.726.0126

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Sculptural Forms - Twists

General Information
- Gauge: 1/2" or 1"
- Finish available: Sandstone or Patent
- Holes drilled at 3form by default: No

Hardware Available:
- Ceiling:
  - Standard
  - Top Gripper (t & b) (smooth collection)
  - Top Gripper (t & b) (curve collection)
  - Cable Loop
  - Twist Insert

For more information, please visit 3-form.com or call 800.726.0126
Sculptural Forms - Twist Details

Twists are only available in Pure Color, High Res, and Graphic Varia Ecoresin with Patent finishes on each side, and in Chroma with a renew finish. Varia edges come polished as a standard. Chroma edges come sanded with a renew finish as a standard. Chroma edges can be polished for an additional charge for polishing Chroma edges. See your Sales Rep for more information on pricing and options.

Various Twist rotations are available with different gauges and widths of material. Twist is available in 90” and 114” lengths. Please use the following matrix as a reference when deciding your Twist options.
Hardware Options - *Bottom Release Gripper*

Please take into account the substrate you are anchoring into when selecting the method of attaching the anchor plate to the ceiling. Each point of hardware holds up to 25 lbs., so ensure that the anchor will bear the appropriate weight of the panel. Confirm that the Ball Grip Plunger Cap is on the cable before threading the cable through the Ball Gripper. After the cable is threaded through the ball gripper, clip the cable at the bottom of the release ball.

**General Information**

<table>
<thead>
<tr>
<th>Application: Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility: All Shapes, no Twists</td>
</tr>
<tr>
<td>Maximum weight: 25 lbs per point</td>
</tr>
<tr>
<td>Cable size: 1/16”</td>
</tr>
<tr>
<td>Gauge: 1/4” - 1/2” (1/2” max)</td>
</tr>
</tbody>
</table>

**Available With:**

- Flow
- Valley
- Swell
- Curve
- Symphony
- Flag
- Alta
- Solitude
- Plane
- X Shape
Hardware Options - Variable Angle Standoff

Depending on the substrate you are anchoring to, use either the M8 threaded insert, option 1, or the concrete anchor, option 2.

General Information

- Application: Vertical & Horizontal
- Compatibility: All Shapes
- Maximum weight: 25 lbs per point
- Gauge: 3/8” max

Available With:

- Flow
- Valley
- Swell
- Curve
- Symphony
- Flag
- Alta
- Solitude
- Plane
- X Shape

For more information, please visit 3-form.com or call 800.726.0126
Hardware Options - **Angled Standoff Adapter**

The adapted standoffs are made for 30° angles, and can only be used with Flow A and B.

![Diagram of Hardware Options - Angled Standoff Adapter]

**General Information**
- **Application**: Vertical & Horizontal
- **Compatibility**: Flow A & B
- **Maximum weight**: 25 lbs per point
- **Gauge**: 3/8" only

**Available With:**
- **Flow**

For more information, please visit 3-form.com or call 800.726.0126

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Hardware Options - *Cable Top Gripper*

For most vertical applications of Shapes, it is recommended that you use an installation with weight born on the floor with a surface bracket and stabilized with a Top Gripper anchored to the ceiling with a cable. This application works with all Shapes and with ½” Twist. For 1” Twist, please see the 1” Twist Insert installation instructions. Hole in Twist for variable surface bracket will need to be drilled on-site.

General Information

| Application: Vertical |
| Compatibility: All Shapes + 1/2” Twist |
| Cable size: 3mm |
| Gauge: 1/4” - 1/2” |

Available With:

- Flow
- Valley
- ZigZag
- Swell
- Curve
- Symphony
- Alta
- Solitude
- X Shape
- Sails
- Crimp
- Twist

For more information, please visit 3-form.com or call 800.726.0126
**Hardware Options - Cable Loop**

For straight ¼” drill–thru holes Twists version.

---

### General Information

| Application: Vertical | Compatibility: All Shapes + 1/2" Twist | Cable size: 3mm | Gauge: 1/2" - 1" |

---

### Available With:

- ZigZag
- Curve
- Twist

---

For more information, please visit 3-form.com or call 800.726.0126

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**Hardware Options - 1" Twist Insert**

There is specific hardware for use with 1" Twists. Twists must be supported on the floor using a Twist floor mount, then stabilized using a cable anchored to the ceiling. Twists should come pre-drilled for this hardware. For this hardware it must be a 1" gauge Twist specified with a 1" hole for the Twist top insert piece.

### General Information

- **Application:** Vertical
- **Compatibility:** 1" Twist with insert holes
- **Cable size:** 3mm
- **Gauge:** 1" Chroma only

### Available With:

- 1" Twist Cable Mount
  - 3-15-1666-K
- 1" Twist Cable
  - 3-15-1638
- 1" Twist Top Insert
  - 3-15-1637
- 1" Diameter Hole
- 1" Twist Panel
- M6 Screw
- 1" Twist Floor Mount
  - 3-15-1644
- 1. M6 Concrete Anchor
  - 3-15-3010
- 2. M6 Threaded Insert
  - 3-15-0762
Hardware Options - *Suspend Panel Connector*

**General Information**
- Application: Vertical
- Compatibility: Varia, Struttura
- Cable size: 3mm
- Gauge: 1/8" - 1/2"

**Available With:**
- ZigZag
- Swell
- Curve
- X Shape

For more information, please visit 3-form.com or call 800.726.0126

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Hardware Options - **Point Support**

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application: Vertical</td>
</tr>
<tr>
<td>Compatibility: Varia, Chroma, Struttura, Stone, Pressed Glass options</td>
</tr>
<tr>
<td>Gauge: 1/8&quot; - 1&quot;</td>
</tr>
<tr>
<td>*See Point Support Solution Document for more information</td>
</tr>
</tbody>
</table>

**Available With:**

- ZigZag
- Swell
- Curve
- Symphony
- Alta
- Solitude
- Plane
- X Shape

Hardware Options - **Hidden Point Support**

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application: Vertical</td>
</tr>
<tr>
<td>Compatibility: Varia only</td>
</tr>
<tr>
<td>Gauge: 1/4&quot; - 3/4&quot;</td>
</tr>
<tr>
<td>*See Hidden Point Support Solution Document for further details</td>
</tr>
</tbody>
</table>

**Available With:**

- ZigZag
- Swell
- Curve
- Plane
- X Shape
Hardware Options - Versa Spider

General Information

<table>
<thead>
<tr>
<th>Application: Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility: Varia, Chroma, Struttura, Stone, Pressed Glass options</td>
</tr>
<tr>
<td>Gauge: 1/4&quot; - 3/8&quot;</td>
</tr>
</tbody>
</table>

*See Versa Solution Document for more information

Hardware Options - Versa Bracket

General Information

<table>
<thead>
<tr>
<th>Application: Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility: Varia, Struttura</td>
</tr>
<tr>
<td>Gauge: 1/4&quot; - 3/8&quot;</td>
</tr>
</tbody>
</table>

*See Versa Solution Document for more information

Available With:

- ZigZag
- Swell
- Curve
- X Shape
Hardware Options - Sputnik and Mini Ball Gripper with Safety Nut

Anchoring is the same as the Bottom Release Gripper. See page 23 for more information. Each Sputnik holds up to 50 lbs. Ensure that the anchor and Sputnik will hold the appropriate amount of weight. Confirm that the Mini Ball Gripper safety cap is on the cable before threading through the Mini Ball Gripper. Once the cable is threaded, leave 1" of cable below the ball, and then secure the safety cap to the ball gripper by threading it onto the release.

Note: Finished assembly must have 1" of cable below the Mini Ball Gripper as well as the Sputnik.

As an alternative to the 1" cable overhang you can swage a stop sleeve on the cable underneath the Mini Ball Gripper and the Sputnik. However, one of these two methods (the 1" overhang under the ball or the compression stop sleeve) must be used during installation. The sleeves and the crimping tool are available through McMaster-Carr using the following information:

- McMaster #3936T35 – Zinc-Plated Copper Stop Compression Sleeve for 1/16" Rope Diameter
- McMaster #3936T34 – Zinc-Plated Copper Stop Compression Sleeve for 3/64" Rope Diameter

Available With:

- Parasol

3-15-1932-K includes these parts in the following quantities:
1× 3-15-1932 Sputnik
1× 3-15-1674 ⅛" Cable w/ End
3× 3-15-1936 Shoulder Washer
3× 3-15-1934 Mini Gripper w/ Safety Nut
3× 3-15-1933 ⅛" Cable
Installation

Horizontal Applications

The tools you will need vary depending on the type of hardware you are using to mount the Shapes and the application details, such as anchoring.

Shapes are most easily installed in a ceiling mounted environment, but can be installed vertically on a wall. For wall mounted environments, please see the Vertical Application instructions on page 34.

1. Place the panel(s) on the floor in the desired position
2. Prepare the panel. Drill holes for the appropriate hardware, see specific hardware pages for more detail.
3. Drill holes into the mounting surface.

⚠️ Take into account the angle of the panel. It may change the hole locations.
4. Suspend the panel to the ceiling with selected hardware. (See specific instructions)
Installation

Vertical Applications

Any Shape can be installed vertically depending on the hardware used. For the Shapes Flow A and B, it is recommended that you use the 6” Angled Standoff Adapters. For detail on that hardware, please see page 25. For other Shapes in a vertical orientation, it is recommended that the Shape is supported either from the top using 3form Cable or along the bottom, allowing it to rest on the ground or in a Variable Angle Floor Bracket (see Fig. 1 below). The included threaded rods and stainless steel tube covers will deflect significantly if they are the sole means of supporting a Shape in a vertical position off another vertical surface (Fig. 2). If that is not possible, it is recommended that two of the Shape Supports are threaded into wood blocking or concrete in such a manner that the Variable Angle Standoff butts up directly against the flange (Fig. 3).

The allowable combinations are presented below:

- Combination 1
- Combination 2
- Combination 3

At least 2 per panel
Installation

Twist Details

Shapes will come with no holes unless specified otherwise, see page 22.

Top Gripper*

*1" gauge available for built-in fitting

Cable Loop

¾" and 1" gauge
¾" top holes for Cable Loop

Top Insert

1" gauge
1" top insert hole for Twist Insert hardware

For more information, please visit 3-form.com or call 800.726.0126

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## General Specifications

<table>
<thead>
<tr>
<th>Material</th>
<th>Finish</th>
<th>Recommended Use</th>
<th>MSDS Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel Plated Brass</td>
<td>Mill Finish</td>
<td>Interior Only</td>
<td>Recycled content typically between 25% - 35% Post Industrial 5% Post Consumer</td>
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<tr>
<td>303 or 304 Stainless Steel</td>
<td>Powdercoating available (may not be feasible for all parts)</td>
<td>Interior Only</td>
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<tr>
<td>18-8 Stainless Steel</td>
<td>Plain</td>
<td>Interior Only</td>
<td>Recycled content typically approx. 60% 35% Post Industrial 25% Post Consumer</td>
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<tr>
<td>Milled Stainless Steel</td>
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<td></td>
</tr>
<tr>
<td>Fasteners &amp; Miscellaneous</td>
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### Part Numbers

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Nickel Plated Brass</td>
<td>3-15-1675, 3-15-1639-K</td>
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<tr>
<td>Fasteners &amp; Miscellaneous</td>
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### Hardware

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Hole Size</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Bottom Release Gripper</td>
<td>1&quot;</td>
<td>23</td>
</tr>
<tr>
<td>Variable Angle Standoff</td>
<td>3/8&quot;</td>
<td>24</td>
</tr>
<tr>
<td>Angled Standoff Adapter</td>
<td>3/4&quot;</td>
<td>25</td>
</tr>
<tr>
<td>Twist Top Insert</td>
<td>1&quot;</td>
<td>28</td>
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<tr>
<td>Hidden Point Support</td>
<td>7/32&quot;</td>
<td>30</td>
</tr>
<tr>
<td>Point Support</td>
<td>5/8&quot;</td>
<td>30</td>
</tr>
</tbody>
</table>

**For more information, please visit 3-form.com or call 800.726.0126**

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