



Elevator Cabs

3form’s Varia is commonly used in Elevator Cabs. This can be a technical solution that requires special knowledge of 3form materials and application methods. To best understand how to use 3form Varia in an elevator cab please see our overview on Fire Rating, Materials, Application Methods, and Glass.

Contents

Materials	1
Application Methods	2

Materials and Fire Rating

When specifying materials for an elevator cab, its important to consider weight, fire rating, and attachment method. Based on these factors, 3form Varia in 3/16" gauge is our most commonly specified product.

Elevator Cabs typically require a Class A fire rated material per ASTM E84 or a passing NFPA 286 test result. To know if your elevator application requires Class A or a NFPA 286, you will need to reference your local building code.

3form offers a variety of beautiful interlayers that comply with Class A fire rating. These interlayers come in a resin gauge of 3/16" and 1" and include color, fabrics, organics, and metallics. Please check with your local 3form sales representative for specifics and pricing.

3form offers glass solutions in a variety of designs and gauges. All 3form glass is considered a non-combustible surface and can be used in place of Class A resin materials, please check with your local code official for more information on glass and fire rating requirements. For a full list of 3form glass products please visit this link (insert link).

ASTM E84 Class A

- Varia 3/16"
- Varia 1"

*Digital Print not Class A

NFPA 286 - Substitute for Class A

- 1/4" Varia adhered to walls or ceiling only
- 3/8" Varia walls on standoffs or ceiling standoffs only

Test	Result
NFPA 286 1/4 " thickness + below (walls only or ceiling only)	Pass
NFPA 286 3/8 " thickness + below (walls in standoff configuration or ceiling only)	Pass

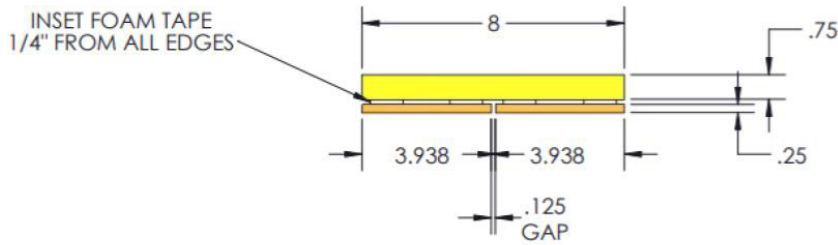
The NFPA 286 corner burn test is accepted by the 2018 IBC for interior finishes. Passing the NFPA 286 test allows for materials to be utilized where Class A materials are required (IBC 801.1.2).

Application

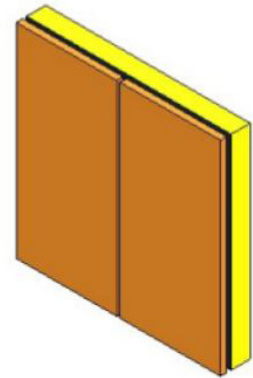
3form Varia can be attached to elevator cabs in a variety of ways. The two most common methods of attachment are directly applied to the wall and standoffs.

In a directly applied application the following parameters should be taken into consideration.

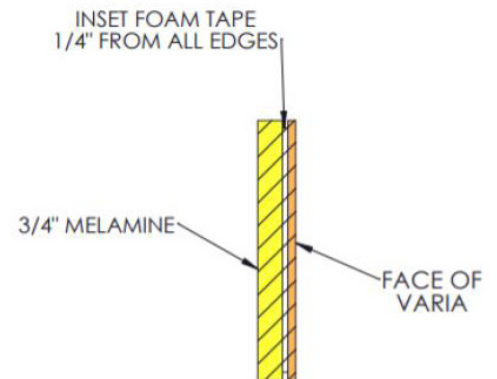
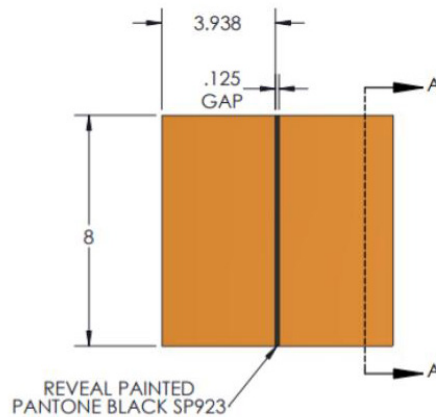
- Varia 3/16" minimum - 1/4" maximum gauge
- Avalanche backer required
- 3M 4496 VHB, Primer 94
- 1/8" expansion/contraction gap
Paint reveal recommended
- Glue directly to wall or glue to
3/4" MDF and hang from cleates



Plan View



Isometric View



Standoffs | Anchors

A common method of attachment for 3form Resins and glass are point supports.

To mechanically fasten a 3form panel using standoffs it is necessary to anchor the standoffs to a structural substrate. Please see the guidelines below for typical anchoring methods or reference the [3form Point Support](#) spec sheet for complete information.

Available Gauges

- 1/8" - 1" Varia

Standoff Lengths

- Standoff 1/2" - 6"



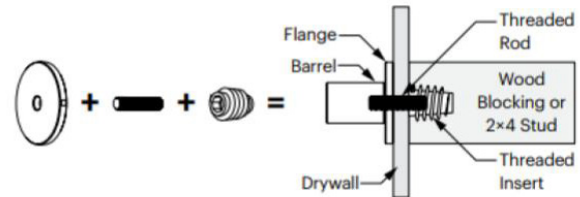
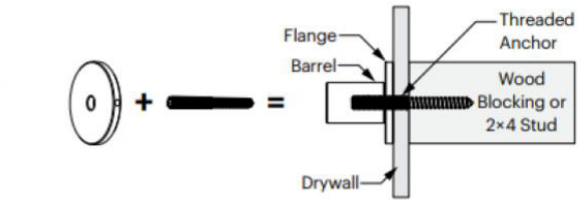
Wood Substrate

3form offers two different options for fastening to a wood substrate: a threaded insert anchor or an externally threaded wood anchor.

The externally threaded anchor has M8 threads on one end upon which the barrel can be fastened directly.

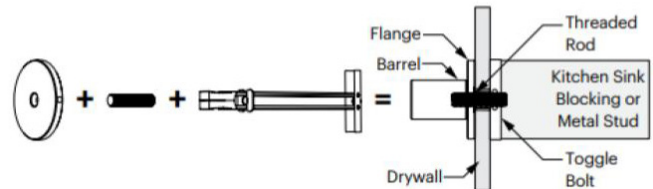
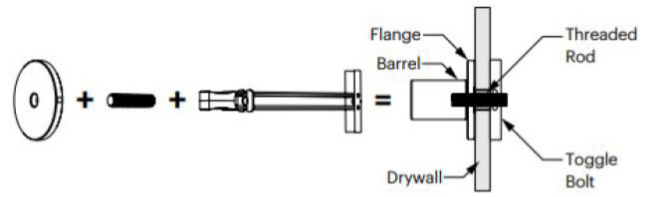
The threaded Insert requires an additional M8 threaded stud to couple the barrel to the anchor.

Both can accept the flange to cover up any pre-drilled openings and add support.



Hollow Wall

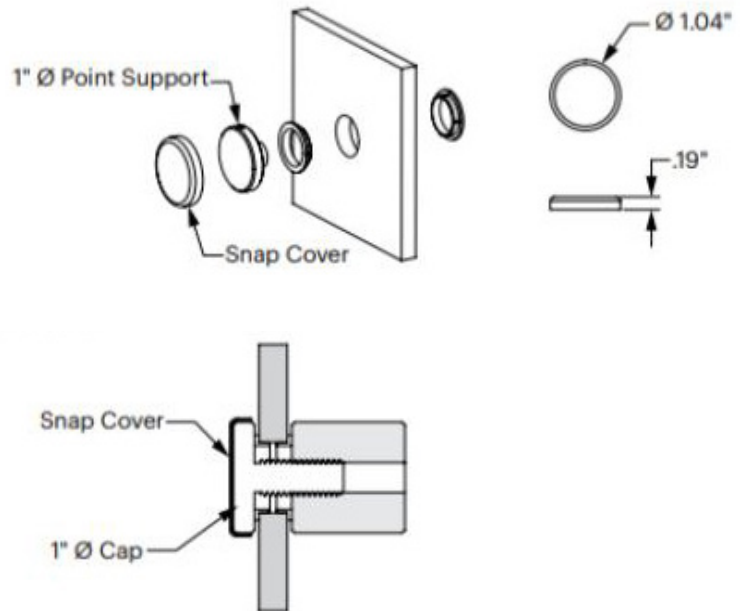
For hollow wall conditions (drywall or sheet metal studs), 3form offers an M8 threaded snap toggle bolt. Similar to the anchor conditions describe previously, the barrel can be fastened to the wall using an M8 threaded stud coupling the barrel with the toggle bolt.



Standoffs | Add Ons

Snap Covers

Snap Covers are an accessory for 1" diameter interior caps. Available in any of the 3form color palette, they can be used to match or accent your Point Supported Panels. Snap Covers are an aesthetic alternative to powder coating and offer a much larger variety of colors and finishes. Each set of Snap Covers is made specifically to match your 3form color selection.



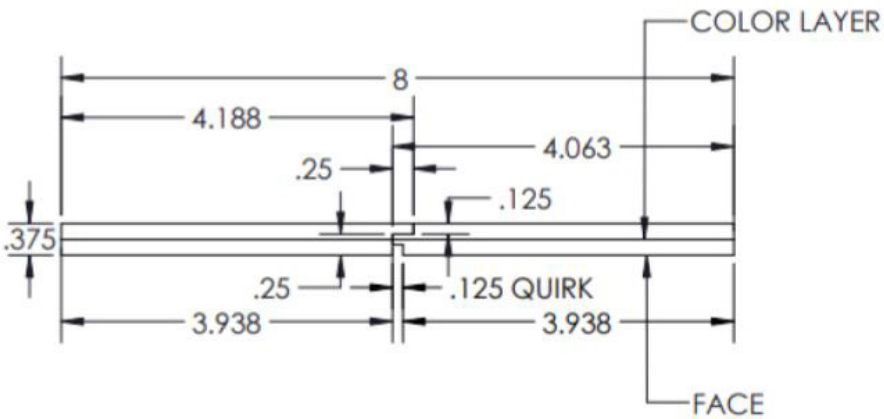
Standoffs | Joinery

When specifying 3form material it is important to consider how the panels come together. At 3form we call this joinery. In elevator cab applications we recommend following the guidelines below. For a complete view of 3form Joinery options please follow this link to the 3form Fabrication Spec sheet (insert link)

- 3/8" and above half lab with quirk recommended
- 1/4" and below, butt joint only



Tongue & Groove with Quirk Loose | Isometric View



Plan View