



Product Update

FEBRUARY 28, 2022

#264

Revision 02

REVEALS

Applicable Rules:

1. Reveals on flush doors may be horizontal, vertical, or radiused, and may intersect. If a radius reveal is required, you must contact the factory for pricing and warranty information.
2. Standard reveals have a rectangular cross-section. Other shapes are available upon special request.
3. Reveals are not allowed in 45-minute Particleboard or UL labeled 45-min Agrifiber core.
4. Where reveals are allowed their dimensions location from lites and door edge as well as inlay requirements will vary.
5. Both faces of the door require the identical reveals to maintain the warranty. **Reveals on one side of the door will void the warranty.** SCL core doors can have shallow reveals one side only or a different reveal pattern on the two faces. This exception does not apply if inlays are required as they would be deep reveals.
6. Reveals in exterior doors are not allowed
7. Reveals (with lumber inlays) are treated like hardware cutouts. They cannot be closer than 3-1/2" to hardware or lite cutouts or 7" to the lock stile of any door having concealed vertical rod hardware. This applies to both horizontal and vertical reveals (See Figure #3).
8. Inlays without liners must be located a minimum of 2" from the center of cylinder lock cutouts and 4" from the centerline of mortised lock cutouts.
9. Reveals requiring lumber inlays must be factory cut.
10. Reveals adjacent to a lite cutout are limited to a maximum depth of 3/64".
11. Available reveal layouts may be limited due to fire rating and/or conflicts between hardware machining and the lumber inlay/reveal machining.
12. Shallow reveals are the only type of reveal allowed in acoustical and lead lined doors and specific bullet resistant doors. STC rating is void if reveal runs through the stiles or rails.
13. Where allowed in 20-min or Non-Rated doors, shallow reveals may include a decorative metal laminate inlay.

Non-Rated doors:

Warranted and available in non-rated, non-mineral core doors (Particleboard or SCL Core).

A. Depth:

1. Shallow Reveal (Without Lumber Inlay):

The **dimensions are limited to 3/64" deep by 3/4" wide**. Cross-banding will be visible in the bottom of the reveal (See Figure #1). There is no maximum length for shallow reveals.

2. Deep Reveal (With Lumber Inlay):

The **dimensions are limited to 3/8" deep by 3/8" wide**. The inlay will be visible in the bottom of the reveal. Inlay species may be selected as compatible or contrasting with face veneer species as desired. To maintain the warranty reveals cannot exceed 31 lineal feet per face (See Figure #2).

UL label doors:

Warranted and available in U.L. doors labeled 20 through 90 minute (Particleboard or SCL core)



Product Update

only available for 20-min.).

A. Depth:

1. Shallow Reveal (Without Lumber Inlay):

The **dimensions are limited to 3/64" deep by 1/4" wide**. Cross-banding will be visible in the bottom of the reveal (See Figure #1). There is no maximum length for shallow reveals. Metal laminate inlays in a shallow reveal are allowed (See Figure # 4).

2. Deep Reveal (With Lumber Inlay):

The **dimensions are limited to 3/8" deep by 3/8" wide**. The inlay will be visible in the bottom of the reveal. Inlay species may be selected as compatible or contrasting with face veneer species as desired. A maximum of 31 lineal feet of reveals is allowed per side to maintain label and warranty (See Figure #2). Inlays in 45-90 min doors require 2-ply fire barrier under the inlay. In addition, inlay cannot cross through the stiles, rails, or required blocking. Where blocking is not involved the minimum stile and rail dimension will be 1"; where 5" blocking is involved the minimum stile and/or rail dimension will be 6".

WHI label doors:

Warranted and available in W.H.I. doors labeled 20-minute, **Particleboard or SCL Core**.

1. Shallow Reveal (Without Lumber Inlay). Maximum 10% of the surface.

The dimensions are **limited to 3/64" deep by 1/4" wide**. Cross-banding will be visible in the bottom of the reveal (See Figure #1). Metal laminate inlays in a shallow reveal are allowed. (See Figure #4).

2. Deep Reveal (With Lumber Inlay). Maximum 15% of the surface.

Requires SCL core.

The **dimensions are limited to 3/8" deep by 3/8" wide**. The inlay will be visible in the bottom of the reveal. Inlay species may be selected as compatible or contrasting with face veneer species as desired. (See Figure #2).

Warranted and available in W.H.I. doors labeled 45 minute, **Agrifiber core**. Maximum door size allowed is 4' x 8'.

1. Shallow Reveal (Without Lumber Inlay). Maximum 25% of the surface.

The dimensions are **limited to 3/64" deep by 1/4" wide**. Cross-banding will be visible in the bottom of the reveal (See Figure #1). Metal laminate inlays in a shallow reveal are allowed (See Figure #4). They must have 3-1/2" minimum margin from the edge of the door or hardware cutout.

2. Deep Reveal (With Lumber Inlay):

Not allowed.

Warranted and available in W.H.I. doors labeled 45 - 90 minute, **Pyroforce core**.

1. Shallow Reveal (Without Lumber Inlay). Maximum 10% of the surface.

The dimensions are **limited to 3/64" deep by 1/4" wide**. Maximum 10% of the surface. Cross-banding will be visible in the bottom of the reveal (See Figure #1).

2. Deep Reveal (With Lumber Inlay):

Not allowed.

Warranted and available in W.H.I. doors labeled 45 - 90 minute, **Mineral core**.

1. Reveals of any type are **not allowed**.



Product Update

Explanation of Shallow Reveals (3/64" Reveal Depth)

Eggers has set the maximum depth of reveals without inlays at 3/64". This dimension allows approximately .065" of cross-banding to remain between the reveal on door core, based on a standard veneer face and 1/11" cross-band. The actual thickness of cross-banding will differ based the tolerances of the materials being used, and the component options.

The inlay requirement is due to both structural and aesthetic concerns. While the use of inlays for reveals deeper than 3/64" addresses the structural concerns they do not avoid all of the aesthetic issues. The aesthetic issue arises when the requested depth of the reveal is close to the location of the crossband/inlay bond.

In such cases the component and machining tolerances may result in part of the reveal having crossband showing at the bottom. To prevent this, the minimum depth of reveals requiring an inlay will be 5/32". This dimension allows for various face options over a 1/11" cross-band plus machining tolerance.



Product Update

Finished options for reveals:

The table below defines the reveal appearance for the reveal finishing “picks” available with factory finished doors.

PICK	Shallow Reveal (without Lumber Inlay) – Crossband is the Visible Surface in the Reveal	Deep Reveal (with Lumber Inlay) – Matching or Compatible Lumber is the Visible Surface in the Reveal
BLACK PAINT	Reveal will be painted black	Reveal will be painted black
SAME AS FACE	<p>If the face will be finished with an <u>opaque varnish</u> the reveal will match the face.</p> <p>If face will be <u>stained</u> the reveal will have the same stain applied as the face, but it will not match the face (usually the reveal will be darker in appearance).</p>	<p>If face will be finished with an <u>opaque varnish</u> the reveal will match the face.</p> <p>If face will be <u>stained</u> the reveal will have the same stain applied as the face and will match the face.</p>
MATCH SAMPLE	The reveal will be finished a different opaque varnish or stain than the face and will match an approved sample with a reveal. For this option there will be separate sample approval numbers for the face and the reveal.	The reveal will be finished a different opaque varnish or stain than the face and will match an approved sample with a reveal.

Terminology

Due to confusion in using different terms to describe the same constructions this information section is to clarify and standardize the terms we use to describe constructions.

The terms “reveals” and “quirks” have been used interchangeably. To standardize, Eggers/VT literature and computer codes will only reference the term “reveal”. The following terms and definitions describe where we will use certain terms.

1. Shallow Reveals (without inlays):

Reveals 3/64” deep, do not need lumber glued into cores (see Figure #1).

2. Deep Reveals (with inlays):

Reveals that require lumber to be glued into a groove in the core prior to face application (see Figures #2 and #3).

3. Lumber Inlays

Lumber glued into a groove in the core material prior to the application of the door facing.

4. Liners

Interior blocking used around cutouts for lites and louvers. Liners extend from one face of the door to the other, replacing the core material in that area.



Product Update

5. Metal Laminate Inlays

Metal laminate with a phenolic backer glued into a shallow reveal (see Figure #4).

