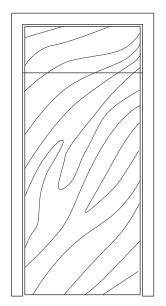
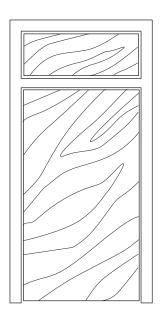
# Door with Transoms (Non Fire Rated) Technical Manual

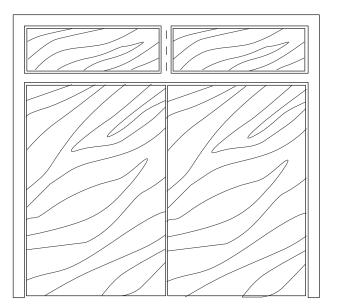


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#### **Non-Rated Doors with Transoms**

- 1. Doors with transoms are available with or without frame transom bars in single or paired openings.
- 2. Meeting edges of transoms and doors in openings without transom bars may be straight cut or rabbeted. See standard rabbet detail.
- 3. Doors with transoms are available in GPD and GCD bonded constructions only.
- 4. GPD has matching rails at bottom of transom and top of door. GCD has non-matching rails at bottom of transom and top of door.
- 5. Spring bolts are required for installation of transom panels. Springbolts must be placed a minimum of 2" (51 mm) from each corner.

  Panels up to 18" (458 mm) in height require 2 springbolts per side.

Panels up to 36" (916 mm) in height require 3 springbolts per side.

Panels up to 40" (1220 mm) in height require 4 springbolts per side.

6. Doors with transoms are available in single openings up to 4'0" x 10'0".

Maximum transom panel size in a single openings up to 4'0" wide x 3'4" high.

Doors with transoms are available in paired openings up to 8'0" x 10'0".

Maximum transom panel size in a paired opening is 8'0" wide x 3'4" high.

### Doors with Transoms (Non-Rated)

### Technical Manual

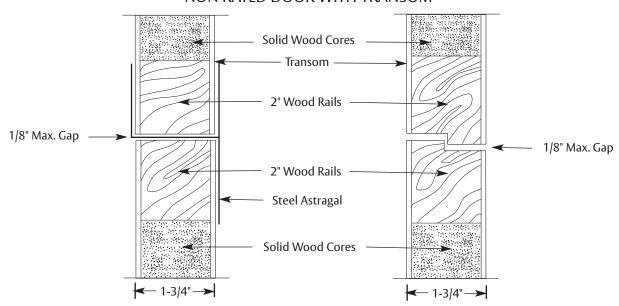
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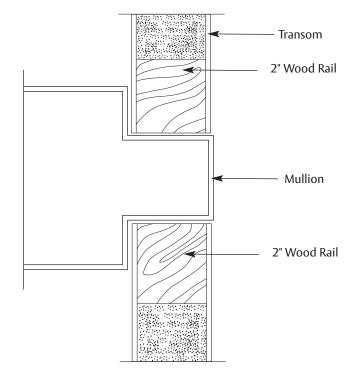
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#### NON RATED DOOR WITH TRANSOM



## DOOR WITH TRANSOM IN FRAME WITH MULLION



## Non-Rated doors with Transoms

- Doors with transoms may be provided with:
  - a. Straight cut meeting edges of door and transom with an over lapping astragal.
  - b. Straight cut meeting edges of door and transom with frame transom bar.
  - c. Rabbeted meeting edges of door and transom.
- 2. A maximum 1/8" (3.2 mm) clearance between door and transom is allowed in non-rabbeted applications.
- 3. Transom panels must be installed sing springbolts placed a minimum of 2" (51 mm) from each corner.

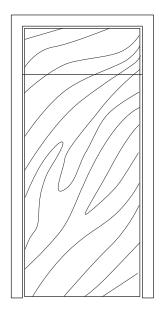


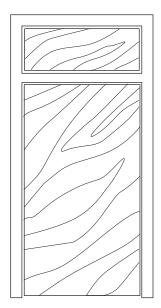
### Doors with Transoms (20 Minute Fire Rated)

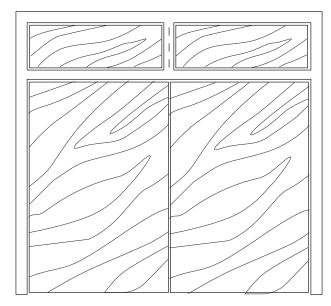
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#### 20 Minute Fire Rated Doors with Transoms

- 1. Transom panels must be the same construction as the 20 minute fire door.
- Neutral pressure tested doors with transom panels may be rabbeted, or installed with a
  metal edge and astragal, or with a transom bar between the door and
  transom.
  - **Positive pressure** tested doors with transom panels must be installed in a frame with a transom bar between the door and transom.
- 3. Transoms installed over a pair of 20 minute rated doors must be separated with a frame mullion. the mullion must limit the width of each separate transom to the width of each leaf of the door pair.
- 4. The transom panel must be machined for spring bolts by the licensed machiner or manufacturer. The appropriate number of springbolts will be supplied by the machiner.
- 5. Fire rating labels will be provided on door and transom stating "Door and Transom Assembly".
- 6. Fire rated Transom panels must be installed using approved steel springbolts. The springbolts shall be placed 2" (51 mm) from each corner with the minimum number centered on each side. Holes must be drilled in the frame to accept the springbolts.

Panels up to 18" (458 mm) in height require 2 springbolts per side. Panels up to 36" (916 mm) in height require 3 springbolts per side. Panels up to 40" (1220 mm) in height require 4 springbolts per side.

- 7. Maximum clearance between the frame and panel must be 1/8" (3.2 mm).
- 8. Doors with transoms are available in single openings up to 4'0" x 10'0". Maximum transom panel size in a single opening is 4'0"wide x 3'4" high. Doors with transoms are available in paired openings up to 8'0" x 10'0". Maximum transom panel size in a paired opening is 4'0" wide x 3'4" high. Transom panels above pairs of doors must be separated by a mullion.

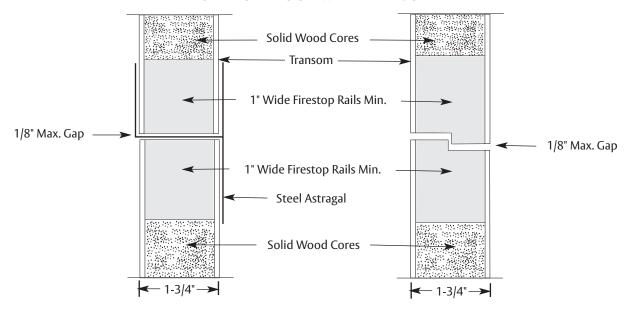
### Doors with Transoms (20 Minute Fire Rated)

### Technical Manual

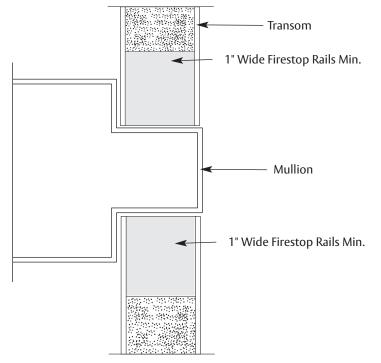
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#### 20 MINUTE DOOR WITH TRANSOM



#### 20 MINUTE DOOR WITH TRANSOM IN FRAME WITH MULLION



#### 20 Minute Doors with Transoms

- **Neutral pressure** tested fire doors with transoms may be provided with:
  - a. Straight cut meeting edges of door and transom with an overlapping astragal.
  - b. Straight cut meeting edges of door and transom with frame transom bar.
  - c. Rabbeted meeting edges of door and transom.

**Positive pressure** tested fire doors with transoms must be installed in a frame with transom bar between the door and transom.

- A maximum 1/8" (3.2 mm) clearance 2. between door and transom is allowed in non-rabbeted applications. Maximum clearance between the frame and transom panel must be 1/8" (3.2 mm).
- 3. Fire rated Transom panels must be installed using approved steel springbolts. The springbolts shall be placed 2" (51 mm) from each corner with the minimum number centered on each side. Holes must be drilled in the frame to accept the springbolts. Panels up to 18" (458 mm) in height

require 2 springbolts per side. Panels up to 36" (916 mm) in height require 3 springbolts per side. Panels up to 40" (1220 mm) in height require 4 springbolts per side.

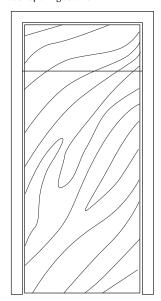


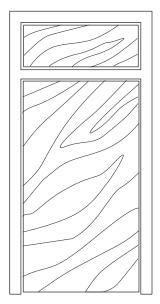
### Doors with Transoms (45/60/90 Minute Fire Rated)

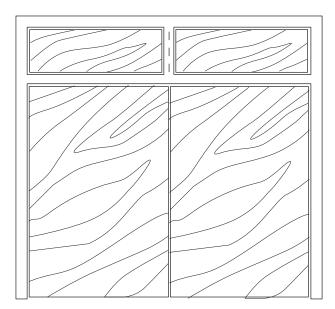
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### 45/60/90 Minute Fire Rated Doors with Transoms

- 1. Transom panels must be the same construction as the fire door.
- 2. **Neutral pressure** tested doors with transom panels may be rabbeted, or installed with a metal edge and astragal, or with a transom bar between the door and transom. Rabbeted door and transom assemblies must be constructed with minimum 5" (127 mm) Firestop bottom rail of transom and top rail of door. The rabbet must be a minimum 1/2" (13 mm) deep x 7/8" (22 mm) wide. **Positive pressure** tested doors with transom panels must be installed in a frame with a transom bar between the door and transom.
- 3. If an overhead door closer is to be installed the bottom rail of the transom and the top rail of the door must be 5" (127 mm) Firestop. When transom bar is provided the rails shall be standard Firestop or Firestop II material.
- 4. Transoms installed over a pair of fire rated doors must be separated with a frame mullion. The mullion must limit the width of each separate transom to the width of each leaf of the door pair.
- 5. The transom panel must be machined for spring bolts by the licensed machiner or manufacturer. The appropriate number of springbolts will be supplied by the machiner.
- 6. Fire rating labels will be provided on door and transom stating "Door and Transom Assembly".
- 7. Fire rated Transom panels must be installed using approved steel springbolts. The springbolts shall be placed 2" (51 mm) from each corner with the minimum number centered on each side. Holes must be drilled in the frame to accept the springbolts.

Panels up to 18" (458 mm) in height require 2 springbolts per side.

Panels up to 36" (916 mm) in height require 3 springbolts per side.

Panels up to 40" (1220 mm) in height require 4 springbolts per side.

Maximum clearance between the frame and panel must be 1/8" (3.2 mm).

8. Neutral pressure tested fire doors with transoms are available in single openings up to 4'0" x 10'0". Positive pressure tested fire doors and transoms are available in single openings up to 4'0" x 9'0". Neutral pressure tested fire doors with transoms are available in paired openings up to 8'0" x 10'0". Positive pressure tested fire doors with transoms are available in paired openings up to 8'0" x 9'0".

Maximum transom panel size in a single opening is 4'0" x 3'4".

Maximum transom panel size in a paired opening is 4'0" wide x 3'4" high.

Transom panels above pairs of doors must be separated by a mullion.

### Doors with Transoms (45/60/90 Minute Fire Rated)

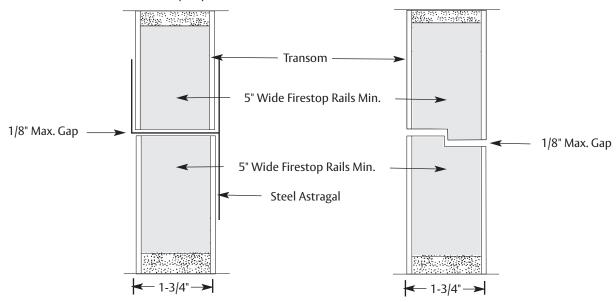
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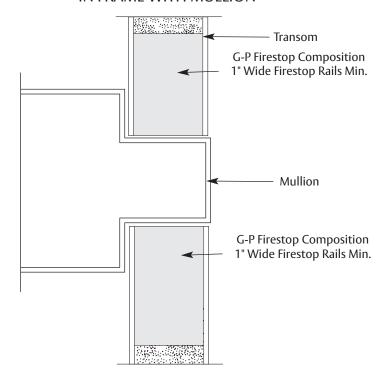


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#### 45/60/90 MINUTE DOOR WITH TRANSOM



#### 45/60/90 MINUTE DOOR WITH TRANSOM IN FRAME WITH MULLION



#### 45/60/90 Minute Doors with Transoms

- **Neutral pressure** tested fire doors with transoms may be provided with:
  - a. Straight cut meeting edges of door and transom with an overlapping astragal.
  - b. Straight cut meeting edges of door and transom with frame transom bar.
  - c. Rabbeted meeting edges of door and transom. Rabbeted meeting edges require 5" (127 mm) bottom rail of transom and top rail of door.
    - **Positive pressure** tested fire doors with transoms must be installed in a frame with transom bar between the door and transom.
- 2. A maximum 1/8" (3.2 mm) clearance between door and transom is allowed in non-rabbeted applications. Maximum clearance between the frame and transom panel must be 1/8" (3.2 mm).
- Fire rated Transom panels must be installed using approved steel springbolts. The springbolts shall be placed 2" (51 mm) from each corner with the minimum number centered on each side. Holes must be drilled in the frame to accept the springbolts. Panels up to 18" (458 mm) in height

require 2 springbolts per side. Panels up to 36" (916 mm) in height require 3 springbolts per side. Panels up to 40" (1220 mm) in height require 4 springbolts per side.