

HINGES & PIVOTS

HINGE RULES, CAPABILITIES, RESTRICTIONS:

- Doors up to 60" require 2 hinges, 60" – 90" require 3 hinges, 90" and more require 1 more hinge for every 30"
- Refer to NFPA-80 for quantities and sizes of hinges allowed on rated doors
- Reference [Door Weights Technical Bulletin](#) to determine if hinges support door weight

Conventional Hinges:

- Butt Hinges – Full mortise, Half mortise, Half surface, Full surface
- Spring Hinges – Full mortise, Half mortise, Half surface, Full surface
- Continuous Hinges – Full mortise, Half mortise, Half surface, Full surface, Double-acting
 - Requires special prefitting

Special Purpose Hinges:

- Wide throw, Swing clear, Raised barrel, Double-acting
 - May affect closer and overhead preps, special pivot point offsets will be required, may require special hardware template
- Anchor – top of door location = 1/64"

Invisible Hinges:

- Requires square hinge stile
- Non-rated requires 3" hinge stile
- Fire-rated requires 5" Pyroforce stile
- Max plate size: 1-1/8" Width x 4-39/64" Length x 13/32" Depth (1.024 Width x 6.102 Length x .236 Depth)
- Max pocket size: 1-1/8" Width x 2-7/16" Length x 1-11/16" Depth (1.024 Width x 4.016 Length x 0.236 Depth)
- May affect closer and overhead preps, special pivot point offsets will be required, may require special hardware template

Cam Lift Hinges:

- Neenah/Two Rivers - 1/8" clearance, will bevel top rail of door
- Holstein – may need a 3/16" clearance, will not bevel top rail of door, locations would need to be adjusted for the correct top clearance

PIVOT RULES, CAPABILITIES, RESTRICTIONS:

- Concealed closer and overhead preps may require special pivot point offsets and special hardware template

Offset Pivots:

- Usually requires beveled hinge edge
- Fire doors with top and bottom pivots will require an intermediate pivot up to 90" and require an additional pivot over 90"

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PIVOTS (CONTINUED):

Center Hung Pivots:

- Typically require convex hinge edges
- 2-Part stiles are required
- VT offers 1 1/8" and 2 1/4" convex edges
- Mortised closers and overheads will require double acting
- No fire ratings
- No STC rating

Pocket Pivots:

- Require concave hinge edges
- 2-Part stiles are required
- No fire ratings

VT Warranty:

- VT'S warranty covers non-rated doors, 1-3/4" through 2-1/4" thick hung on top and bottom pivots only
- Coverage includes Stile & Rail doors and flush doors constructed using Particleboard, SCLC, Agrifiber, and Lead lined doors with these core types
- In addition to regular offset pivot applications, coverage allows center hung doors to carry our full warranty
- Coverage includes applications where a top pivot is used in combination with a floor closer (where the floor closer includes a pivot arm)
- It is the responsibility of the door specifier to ensure the selected hardware is appropriate for the door weight and application, and that both pivots have the same offset
- Warranty coverage does not apply for doors that also include moulding or appliqué's to one face only or have different species or finish on the faces
- Top/Bottom Pivots - coverage applies to non-labeled doors. NFPA-80 requires labeled fire doors to have 2 hinges (or pivots) on doors up to 5' tall and an additional hinge (or pivot) for each 30" or fraction thereof
- Warranty coverage applies to:

DOOR TYPE	MAXIMUM WIDTH	MAXIMUM HEIGHT
Flush Particleboard & Agrifiber	4'	8'
Flush Structural Composite Lumber Core	4'	9'
Stile & Rail Doors	4'	8'