



TC200
THERMAL-CORE SECTIONAL DOORS



DIVISION 8 SECTION 08360

ACCEPTABLE MANUFACTURER

Sectional doors shall be TC200 as manufactured by Raynor of Dixon, Illinois.

OPERATION

Operation shall be manual, motor and/or hand chain as specified and detailed on door schedule. (Note: delete from list any operations that do not apply).

SECTIONS

- A. Material: Sections shall be steel sandwich construction, 2" (50.8 mm) thick, roll-formed from commercial draw quality, hot-dipped galvanized steel per ASTM A-924 and A-653. Exterior and interior section skins to be constructed of 25 gauge (.015" minimum steel thickness) embossed stucco texture, mechanically interlocked and pressure bonded to a 1 7/8" (48mm) thick, expanded polystyrene core. Hinge reinforcement plates shall be 16 gauge edge plates and 16 gauge center plates, located within section interior at every hinge location. End stiles to be 18 gauge.
- B. Mounting: Sections shall be mounted in the door opening using (select from list below):
1. Lap Jamb Angle Mounting: sections shall overlap the door jambs by 1" (25mm) on each side of the door opening.
 2. Between-Jamb Bracket Mounting: sections shall be mounted between the door jambs, and seal against exterior perimeter seal installed along the vertical and top horizontal edges of the jambs.
- C. Insulation: Sections will have an R-value of 10.25 and U-value of .097.
- D. Seals: Interior and exterior skins to be separated by a continuous dual durometer vinyl seal held in place by a mechanical interlock to form an effective thermal break and a complete weatherseal along the section joint. Top of door to be provided with dual durometer vinyl standard. Bottom of door to have flexible U-shaped vinyl seal in an extruded aluminum retainer.
- E. Trussing: Doors shall be designed to withstand a windload of 12 P.S.F. Deflection of door in horizontal position to be a maximum of 1/120th of door width.
- F. Color: Interior skins to have two coats of paint, one primer coat and one finish coat. Interior skin color shall always be white, exterior skin color shall be (select from list below):
1. White: Polyester paint
 2. Almond: Polyester paint
 3. ClayTone: Polyester paint
 4. BronzeTone: Polyester paint
 5. Dark Brown: Kynar[®] Paint
 6. Frost White: Kynar[®] Paint
 7. Sepia: Kynar[®] Paint
 8. Beige: Kynar[®] Paint
 9. ArmorBrite[™] Powdercoat, color as selected from manufacturer's selection. Color: _____.
- G. Window Type: Sections may be furnished with either Oval-type or Full-view (square edge-type) windows. Quantity and location(s) of windows shall be per door elevation drawing(s) (select from list below or delete section):
1. 24" x 8" x 5/8" (610 x 203 x 20mm) Oval Window: encased in a one-piece vulcanized EPDM rubber frame.
 2. 36" x 14" x 1/2" (914 x 356 x 13mm) Full-View: encased in an extruded PVC frame (Note: PVC frames not available to match ArmorBrite colors; Beige Kynar supplied with ClayTone PVC frames; Sepia Kynar doors supplied with the BronzeTone PVC frames).
 3. 42" x 14" x 1/2" (1067 x 356 x 13mm) Full-View: encased in an extruded PVC frame.
- H. Glazing: Windows to be provided with insulated glazing units as follows:
1. Glass consisting of two panes of 1/8" (3.2mm) thick DSB glass.
 2. Glass consisting of two panes of 3/16" (4.8mm) thick glass.
 3. Reinforced glass consisting of one pane of 1/4" (6.4mm) thick wire-reinforced glass (exterior pane) and one pane of 1/8" (3.2mm) DSB glass (interior pane).

TRACK

- A. Material: Track shall be hot-dipped galvanized steel per ASTM A-653, fully adjustable for adequate sealing of door to jamb or weatherseal.
- B. Type: Track may be configured as Normal Headroom, Low Headroom, Vertical Lift, Lift-Clearance, Incline and/or Contour, as noted and detailed on door schedule. (Note: delete from list any configurations that do not apply).
- C. Size: Track size shall be (select from list below):
1. 2" (51mm): as normally-provided.
 2. 3" (76mm): as optionally-provided, for promoting higher cycle life and durability.
- D. Mounting: Tracks shall be either bracket-mounted or angle-mounted (select from list below):
1. Bracket-Mount: Using 2" adjustable track bracket as typically provided for use with wood jambs.
 2. "Floor-to-Header" Angle-Mount: Consisting of continuous angle extending from the floor up to the door header, for use with steel, wood or masonry jambs. Continuous angle size shall not be less than 2 5/16" x 5" x 3/32" (59 x 127 x 2.5mm).
 3. "Floor-to-Shaft" Angle-Mount: Consisting of continuous angle extending from the floor, past the header, and completely up to the door shaft



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for use with steel, wood or masonry jambs. Continuous angle size shall not be less than 2 5/16" x 5" x 3/32" (59 x 127 x 2.5mm) on 2" track.

E. Finish: Track finish shall be (select from list below):

1. Galvanized: as normally-provided.
2. White Powdercoat: as optionally-provided.

COUNTERBALANCE SYSTEM

A. Type: The spring counterbalance shall be provided with aircraft-type, galvanized steel lifting cables with minimum safety factor of 5. Counterbalance system shall be (select from list below):

1. Torsion Springs: as normally-provided, consisting of heavy-duty oil-tempered wire torsion springs on a continuous ball-bearing cross-header shaft.
2. Weight Counterbalance: as optionally-provided for lift clearance and vertical lift only.

B. Cycles: Torsion spring counterbalance shall achieve (select from list below):

1. 8,000 cycles
2. 25,000 cycles
3. 50,000 cycles
4. 100,000 cycles

HARDWARE/ACCESSORIES

A. Hinges and fixtures: All hinges and brackets shall be made from galvanized steel.

B. Rollers: Track rollers shall have a 2" (50.8mm) or 3" (76.2mm) diameter, consistent with track size. Rollers shall have hardened steel ball bearings.

C. Perimeter Seal: Doors shall be furnished with complete weather stripping system to reduce air infiltration. Weather stripping shall be replaceable without removal of track, mounting hardware, or door hardware.

1. Bracket Mounted Doors: as optionally-provided with climate seal or vinyl seal with aluminum retainer.
2. Angle Mounted Doors: as normally-provided with angle clip-on seal.

D. Accessory Lock: Door systems may be furnished with an exterior or interior locking device (select from list below or delete section):

1. Exterior Lock: shall have five-pin tumbler cylinder with night latch and steel bar engaging track.
2. Interior Lock: shall have interior dead bolt provided with hole to receive padlock (padlock by others).