

TC300

QUICK SPECS

COMMERCIAL SECTIONAL DOORS



DIVISION 8 SECTION 08360

- 3" THICK
- SANDWICH CONSTRUCTION
- 25 GAUGE STEEL SKINS

ACCEPTABLE MANUFACTURER

Sectional Doors shall be TC300 as manufactured by Raynor of Dixon, Illinois.

OPERATION

- A. Operation of the door shall be (select from list below):
1. Manual: (as normally provided).
 2. Hand-chain: (as optionally provided). Not compatible with front-mount low headroom track systems. See track type specifications.
 3. Automated Operator: (as optionally provided) specific motor hp and installation configuration determined by door size and track construction.
 4. Automated Operator with Hand-chain: (as optionally provided) some restrictions apply – see Raynor operator specifications.

SECTIONS

A. **Description:** Sections shall be 3" [76.2mm] thick; interior and exterior skins shall be roll-formed and embossed with a stucco surface texture, mechanically interlocked and pressure bonded to a 2 7/8" [73mm] extruded polystyrene core. The bottom section shall be punched for step plates unless otherwise specified.

B. **Material:** Interior and exterior skins shall be manufactured from 25 gauge, (minimum 0.017") [0.432 mm.], commercial quality galvanized steel (CQGS) in compliance with ASTM A-653. End stiles shall be galvanized, 14 gauge CQGS (minimum 0.078") [1.981mm]. Edge hinge reinforcement plates shall be made of 14 gauge CQGS (minimum 0.078") [1.981mm]. Center hinge reinforcement plates shall be made of 16 gauge CQGS (minimum 0.055") [1.397mm].

C. **Insulation:** Sections shall have an R-value of 17.05 (U-value of 0.059), calculated in accordance with ASTM C-518 and DASMA Technical Data Sheet #163.

D. **Seals:** Interior and exterior section skins shall be assembled using a dual-durometer vinyl weather seal, mechanically interlocked to form an effective thermal break, and shall include a continuous weather seal along the entire section joint. The top section of the door shall be provided with a continuous length EPDM rubber sealing strip. The bottom section of the door shall be provided with continuous length aluminum retainer and a U-shaped (select from list below):

1. 3" Gray Vinyl Seal (as normally provided).
2. 4" Gray Vinyl Seal (as optionally provided).
3. 3" Black Ribbed EPDM Seal (as optionally provided).
4. 3" Yellow Vinyl Seal (as optionally provided).

E. **Trussing:** Sections shall be designed to withstand wind loads of 20lbs/sq.ft. (97.6 kg/sq.m.). Trussing specifications shall be determined by manufacturer, and shall not allow deflection of door while in horizontal position to exceed 1/120th of door width.

F. **Color:** The interior section color shall be white, with one coat of polyester paint primer and one coat of polyester paint finish. The exterior section color shall be (select from the list below):

1. White Polyester Paint (as normally provided).
2. Beige Kynar™ Paint (as optionally provided).
3. Dark Brown Kynar™ Paint (as optionally provided).
4. Sepia Brown Kynar™ Paint (as optionally provided).
5. Frost White Kynar™ Paint (as optionally provided).
6. ArmorBrite™ Powder-coat Paint System: featuring 187 standard and infinite (RAL) custom colors (as optionally provided).

G. **Oval Windows (optionally provided):** Door sections may be provided with oval type windows (delete this section if not applicable). Oval windows shall be encased in a one-piece, vulcanized EPDM rubber boot and shall be sized according to door widths. Minimum glass size shall be 24" x 8" [610 x 203mm].

H. **Rectangular Windows (optionally provided):** Door sections may be provided with rectangular type windows (delete this section if not applicable). Rectangular windows shall be encased in an extruded PVC frame and shall be sized according to door widths. Minimum glass size shall be 36" x 14" [914 x 356mm].

I. **Glazing:** Doors equipped with optional windows and glass shall feature 5/8" [16mm] thick insulated panes. Custom options available including tinted glass and reflective glass. Individual window pane thickness shall be (select from the list below):

1. 1/8" [3.2mm] DSB interior and exterior panes.
2. 3/16" [4.8mm] interior and exterior panes.
3. 1/4" [6.4mm] wire glass exterior pane and 1/8" [3.2mm] DSB interior pane.

TRACK

A. **Material:** Door tracks shall be 12, 13, or 16 gauge galvanized steel (actual gauge will be determined by the manufacturer) per ASTM A-653, and shall be fully adjustable for adequate sealing of door to jamb and/or weatherseal.

B. **Size:** Track size shall be (select from list below):

1. 2" [51mm] and determined by door size (as normally provided).
2. 3" [76 mm] track is available as an optional upgrade from 2" track or as provided by manufacturer based on door size or weight.

C. **Finish:** The track system and brackets/angles that support the tracks shall be (select from the list below):

1. Galvanized (as normally provided).
2. Powder-coated: white powder-coat available (as optionally provided).

D. **Type:** The track system shall be configured to compliment the opening conditions of the building structure. Based on headroom and backroom, manufacturer will provide (select from the list below):

1. Normal Headroom Track Configuration: door transitions into horizontal track immediately upon travel from closed to open position (as normally provided).
2. Lift Clearance (high lift) Track Configuration: door travels the maximum distance allowed by available headroom above door, before transitioning into horizontal track as door travels from closed to open position.
3. Vertical Lift Track Configuration: door travels vertically through entire operation from closed to open position.
4. Front-mount, Low Headroom Track Configuration: very limited headroom above door header.
5. Rear-mount, Low Headroom Track Configuration: headroom above door header is restricted.
6. Incline Track Configuration: door track angles match the pitch of the roof line.
7. Contour Track Configuration: door track angles match the pitch of the roof line and then angles again to match the ceiling.

E. Mounting: The door tracking system shall be fastened to the door opening using (select from list below):

1. Bracket Mounts: the track shall be fastened to the jamb using individual track brackets: as normally provided for 2" (50.8mm) track when mounting to wood. When bracket mount is used, the section width is equal to the opening size.
2. Angle Mounts (floor-to-header): as normally provided for 3" (76.2mm) track, optionally provided for 2" (50.8mm) track, when mounting to steel or masonry.
3. Angle Mounting (floor-to-shaft): when angle mount is installed above header to the torsion assembly; typically used when section width extends past the door opening by 1"(25.40mm). Angle mount will be a continuous angle measuring not less than 2 5/16" x 5" x 3/32" (59 x 127 x 2.5mm).

COUNTERBALANCE SYSTEM

The manufacturer shall provide a complete counterbalance system that shall be durable enough to operate the door for a minimum of 10,000 cycles using tempered wire torsion springs, as normally provided for doors systems with limited daily use. If higher cycle springs are required (select from the list below):

1. 25,000 cycles: Appropriate for door systems with regular daily use and/or higher cycle life (as optionally provided).
2. 50,000 cycles: Appropriate for door systems with frequent to continuous daily use (as optionally provided).
3. 100,000 cycles: Appropriate for door systems with continuous daily usage (as optionally provided).

HARDWARE

A. Hinges: Graduated edge and center hinges shall be made from a minimum of 11, 13, or 14 gauge galvanized steel according to track size, door size and track options of door system (as normally provided).

B. Rollers: 2", 3", short-stem, long-stem, nylon or steel rollers shall be provided according to track size, door size and track options of door system (as normally provided).

C. Fasteners: Hinge screws, whiz nuts, track bolts and all jamb fastening hardware shall be provided for complete assembly of track, sections and counterbalance system (as normally provided).

D. Step Plates: Step plate receiver holes shall be cut into bottom door sections, and step plates and step plate installation hardware shall be normally provided.

ACCESSORIES

A. Perimeter Seal: Angle mounted doors shall be provided with a clip on rigid retainer and replaceable rubber seal. Bracket mounted doors may be optionally supplied with a perimeter seal that shall be (select from list below):

1. Dual durometer vinyl weather seal matching exterior color.
2. Gray vinyl seal with aluminum retainer.

B. Locks: Door systems may be furnished with an interior or exterior lock (select from list below):

1. Interior lock provided shall be a dead bolt mounted on section engaging through the track with hole provided to accept padlock (by others).
2. Exterior lock shall be provided with two keys and a five pin tumbler with a night latch and steel bar engaging the track.

C. Pusher Springs: Accessory springs that are mounted on the back of the horizontal track to prevent cable from coming off the drum: (normally provided with Normal Headroom chain hoist operated doors, optionally provided for all others).

D. Bumper/Leaf Springs: An accessory that is recommended for manually operated vertical lift doors to cushion the door stop at the top of the track.

E. Monoxide Vents: Recommended for garages to vent engine exhaust. Manufacturer will punch a hole into the bottom section to accept the vent assembly (select size from list below):

1. 3" (76mm) vent
2. 4" (102mm) vent
3. 5" (128mm) vent

F. Pedestrian Door: When a pass door is required, the manufacturer shall provide a 32" wide x 3 sections high pass door: (some restrictions may apply).

G. Removable Center Posts: A post securing the tracks between two sectional doors that, when removed, increases the clear opening width: (some restrictions may apply).

1. Carry-Away Post: may be physically lifted and removed from opening.
2. Swing-Up: cable lifts posts out of opening, may be motor or crank-operated.