ASSA ABLOY
1-3/4" Trio-E DOOR
VERTICALLY STEEL STIFFENED LAMINATED CORE
WITH POLYURETHANE FOAMED IN PLACE

BEVELED LOCK EDGE, HANDED
SQUARE LOCK EDGE, NON-HANDED

Full Flush or Seamless Style ...
Vertically steel stiffened core with foamed in place polyurethane fills entire door cavity. Core is chemically bonded to all interior surfaces. High impact resistance. Excellent insulation characteristics. 22 gage steel stiffeners are placed 6" apart and welded every 5" along their length.

Suggested Use:
Interior or Exterior ...
Motels/Hotels
Office Buildings
Urban Renewal
Health Care
Institutional
Data Processing
Mercantile
Food Processing
Schools/Training Centers
Institutional Facilities
Public Utility Stations
Government Buildings
Warehouses/Factories
Manufacturing Plants
Transportation Terminals
Vehicle Service Facilities

PATENTED

DESCRIPTS

D19A
Hardware locations shown match Ceco standard frames.

**TECH-DATA**

**TRIO-E DOORS**

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**DOOR ELEVATION**

**VERTICAL SECTION**

**HORIZONTAL SECTIONS**

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)

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**OVERLAPPING ASTRAGAL 4441**

FOR 1-3/4" THICK DOORS

![Diagram of single swing door with overlapping astragal](image1)

**OVERLAPPING ASTRAGAL 4471**

FOR 1-3/4" THICK DOORS

![Diagram of double swing door with overlapping astragal](image2)
**PRODUCT SPECIFICATIONS:**

1-3/4" Thick steel doors shall be as manufactured by Ceco Door, Milan, TN USA. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 & HMMA 867; see chart below for performance classifications.

**TRIO-E** doors are made full-flush or (optional) seamless style. Face sheets are commercial quality cold rolled steel conforming to ASTM A1008 ...or (optional) hot-dipped galvanized steel conforming to ASTM A924 and A653 -- see chart below.

**TRIO-E full-flush doors** have mechanically interlocked, hemmed, hairline seams on vertical edges and have no visible seams on faces (S.D.I. Model 1). Doors specified "seamless" have no visible seams on faces or vertical edges (S.D.I. Model 2). Face sheets are supported by a steel stiffened laminated core with polyurethane filler. 22 gage stiffeners are placed no more than 6" apart and welded no more than 5" O.C. along their length to a 22 gage liner plate. The core fills the entire door cavity and is chemically bonded to all interior surfaces. Density of foam exceeds 1.8 pcf and it has a crush strength of 3600 psf. The top and bottom door edges are closed with 16 gage steel channels welded to both face sheets.

**Hardware Provisions:** Hinge preparations are handed. Hinge edges are mortised for 4-1/2" or 5" high, standard and heavy weight hinges (specify which). 7 gage steel hinge reinforcements are welded inside the door edge and are drilled and tapped for fasteners in accordance with ANSI A156.7. The lock edge has a standard bevel (1:16) and is prepared for Gov. series 86 or 160/161 locks in accordance with ANSI A115 (specify which). Optional closer reinforcement is a 14 gage steel channel.

**Paint:** 1-3/4" steel doors shall be provided with one coat of oven-cured neutral color primer paint. Primer coat shall conform with ANSI A250.10. The primer coat is a preparatory base for necessary finish painting. "Colorstyle" finish coat is also available from a selection of standard colors (optional). Colorstyle finish is electrostatically applied, oven-cured urethane enamel, and shall conform to ANSI A250.3. For accurate color selectors ask for a Ceco Colorstyle chart.

**MATERIAL**

| DOOR FACING SHEETS | LEVEL | C.R.    | GALV A60 | G90 RECOMMENDED DOOR FRAME MATERIAL |
|--------------------|-------|---------|---------|------------------------------------|----------------------------|
| 18 Gage Steel      | Heavy Duty | STD | OPT | OPT | 16 Gage Steel                      |
| 16 Gage Steel      | Extra Heavy Duty | STD | OPT | OPT | 16 or 14 Gage Steel               |
| 14 Gage Steel      | Maximum Duty | STD | OPT | OPT | 14 or 12 Gage Steel               |

**PERFORMANCE**

<table>
<thead>
<tr>
<th>Sound Transmission Class:</th>
<th>N/A</th>
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<tbody>
<tr>
<td>Physical Endurance Level:</td>
<td>Meets ANSI A250.4 Performance Test, Level A (1,000,000 Cycles) 18, 16 and 14 Gage</td>
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**Thermal Characteristic Value:**

- NFRC 102-2014 & ASTM FLUSH DOOR WITH MERCURY FRAME: R = 2.78 \( U = 0.38 \)
- NFRC 102-2014 & ASTM FLUSH DOOR WITH WEATHERSEAL FRAME: R = 2.63 \( U = 0.38 \)
- NFRC 102-2014 & ASTM FLUSH DOOR WITH STANDARD FRAME: R = 2.44 \( U = 0.41 \)

\*NFRC102-2014: The general requirements of testing shall be as defined in NFRC 102, ASTM C1199 and ASTM C1363.

**Air Infiltration:**

NFRC 400 RESISTANCE TO AIR INFLATION & ASTM TEST METHODS:

- MERCURY TQB FRAME & TRIO-E DOOR
- NFRC 400 (0.1 CFM SQ.FT.)