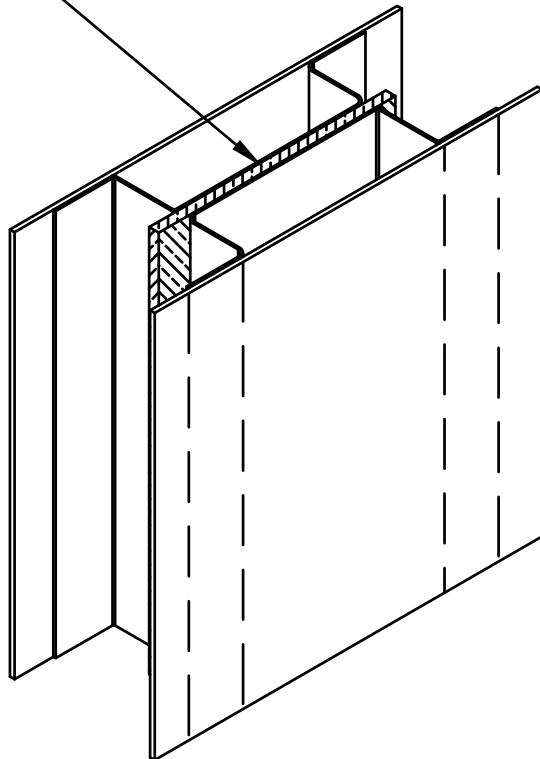


D22-1

1-3/4" LEAD LINED

VERTICALLY STEEL STIFFENED, SEAMED EDGES, CUSTOM TYPE STEEL DOORS, BEVELED LOCK, HANDED

LEAD PLACED BETWEEN EACH HALF OF STIFFENER



| MODEL | LEAD THICKNESS |
|-------|----------------|
| LL32 | 1/32" |
| LL16 | 1/16" |
| LL08 | 1/8" |
| LL04 | 1/4" |
| LLXX | CUSTOM |

Designed to restrict radiation transmission.

Complies with NAAMM Specifications 22 gage steel stiffeners placed 6" apart and welded every 5" along their length. Seamless edges. Fiberglass, sound deadening insulation between stiffeners.

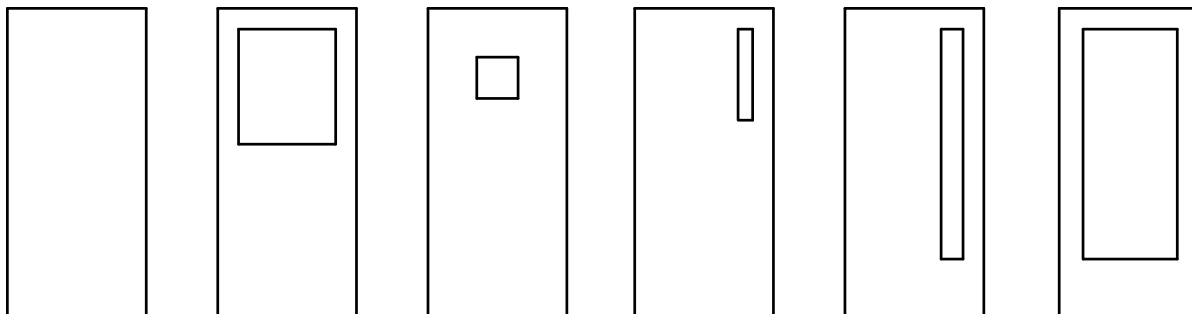
Suggested Use:

Interior or Exterior...

- Medical X-Ray Labs*
- Nuclear Medicine Storage*
- Industrial Applications*
- Cancer Treatment Facilities*
- Produce Irradiation Areas*
- Research Facilities*
- Inspection Departments*

FIBERGLASS INSULATION BETWEEN STIFFENERS

DOOR DESIGNS



F

G

V

N

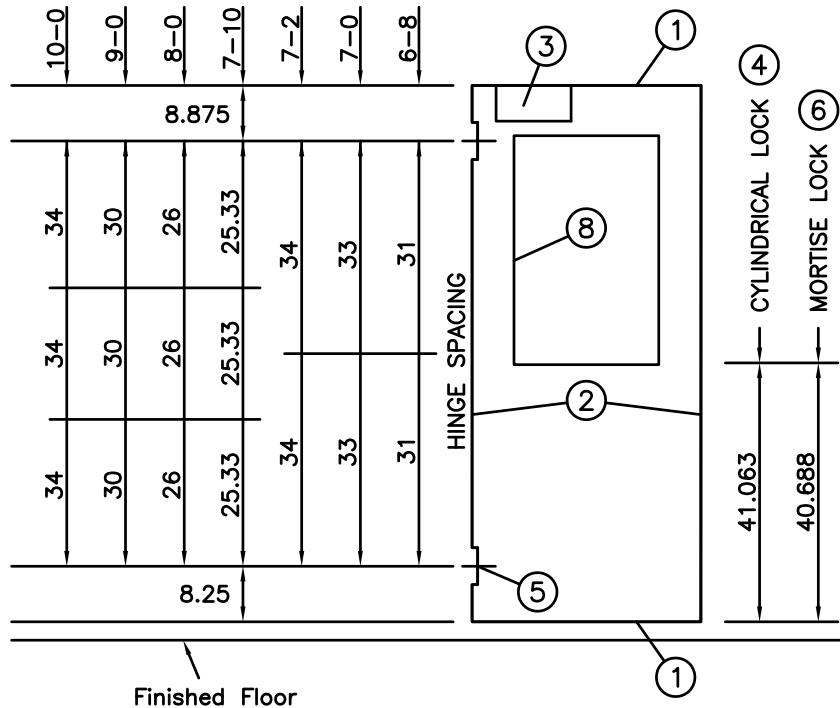
N

FG

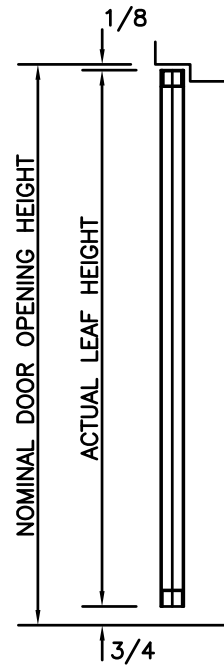
05/02/16

D22-2

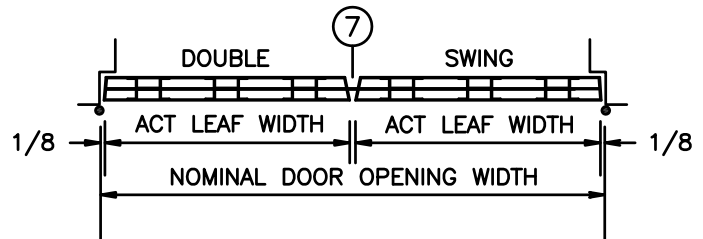
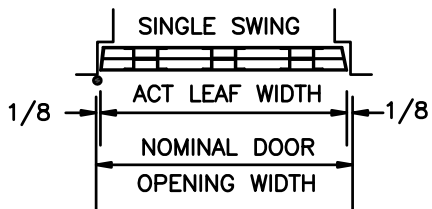
Hardware locations shown match Ceco standard frames.



DOOR ELEVATION



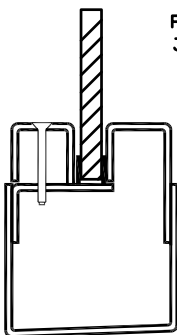
VERTICAL SECTION



HORIZONTAL SECTIONS

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.4 mm)

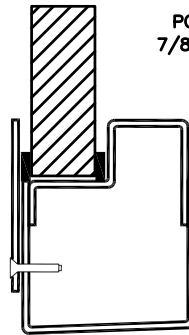
OPTIONAL:
GLASS KIT



POCKET SIZE
3/8" - 3/4"

GLASS KIT DESIGN MAY VARY
WITH GLASS THICKNESS
GLASS KIT FACTORY INSTALLED.
GLASS & GLAZING NOT FACTORY INSTALLED.

OPTIONAL:
GLASS KIT

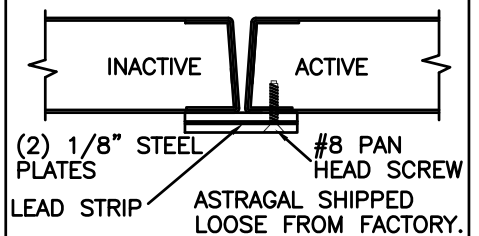


POCKET SIZE
7/8" - 1-3/8"

GLASS KIT DESIGN MAY VARY
WITH GLASS THICKNESS
GLASS KIT FACTORY INSTALLED.
GLASS & GLAZING NOT FACTORY INSTALLED.

OVERLAPPING ASTRAGAL
(OPTIONAL)

FOR 1-3/4" THICK
DOORS



Ceco Door

ASSA ABLOY

05/03/16

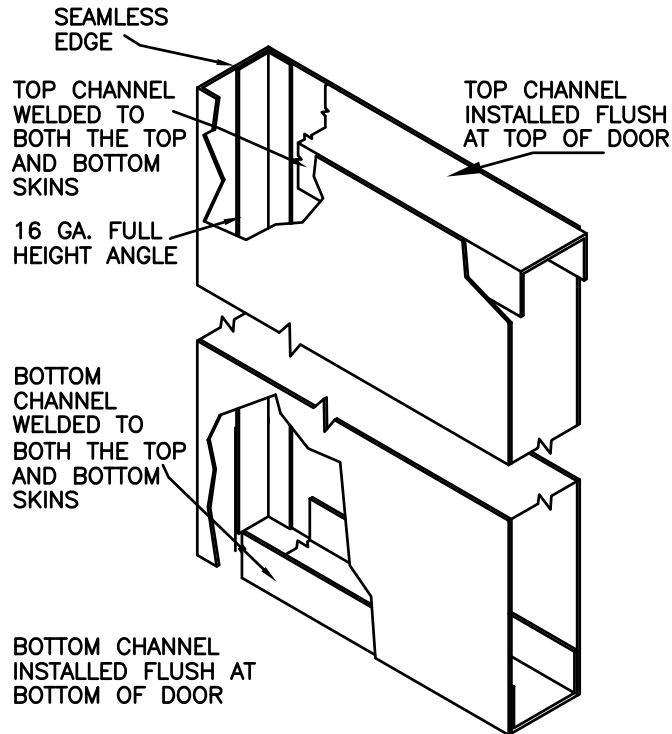
TECH-DATA

LEAD LINED DOORS

D22-3

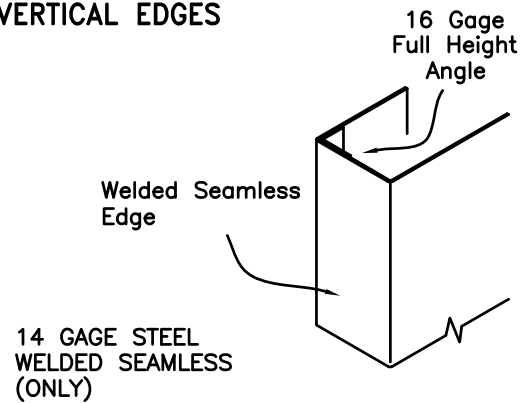
END CHANNEL PREPARATION

①



VERTICAL EDGES

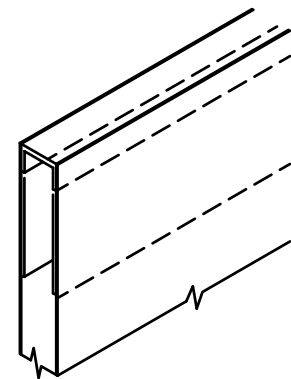
②



CLOSER REINFORCEMENT (OPTIONAL)

③

14 GAGE STEEL PLATES 20" LONG

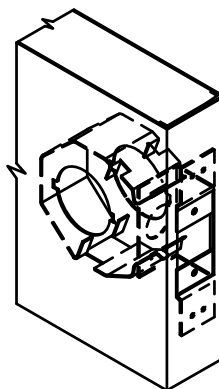


LOCK PREPARATION GOV. 160/161 CYLINDRICAL TYPE

④

LEAD SHIELDED HARDWARE
BY OTHERS

(LC1)
(ANSI A115.2)
2-3/4" BACKSET



LOCK EDGE IS BEVELED
1/8" in 2" (1:16)

HINGE PREPARATION

⑤

4-1/2 OR 5 IN.
HIGH, STANDARD
OR HEAVY WEIGHT,
FULL MORTISE HINGES

ANSI 156.7
TEMPLATE

HINGE EDGE IS
HANDED AND
SQUARE

14 GA AND 12 GA DOORS REQUIRE
HEAVY WEIGHT, FULL MORTISE HINGES

7 GAGE STEEL
REINFORCEMENT



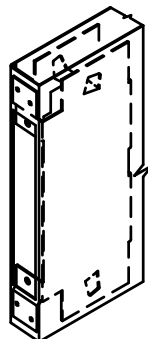
LOCK PREPARATION GOV. 86-4 MORTISE TYPE

⑥

LEAD SHIELDED HARDWARE
BY OTHERS

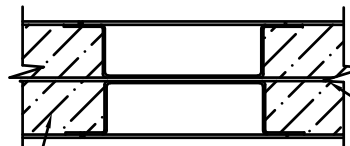
(LMO) SIMILAR TO DETAIL
LESS FACE CUTOUT

(LPO) SIMILAR TO DETAIL
LESS ALL CUTOUTS
AND REINFORCEMENT



CORE

22 GAGE MINIMUM STIFFENERS
SPACED NOT MORE THAN 6" APART



(HORIZONTAL SECTION)

LEAD SHEET BETWEEN
STIFFENER SURFACE

FIBERGLASS INSULATION
BETWEEN STIFFENERS

06/07/16

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

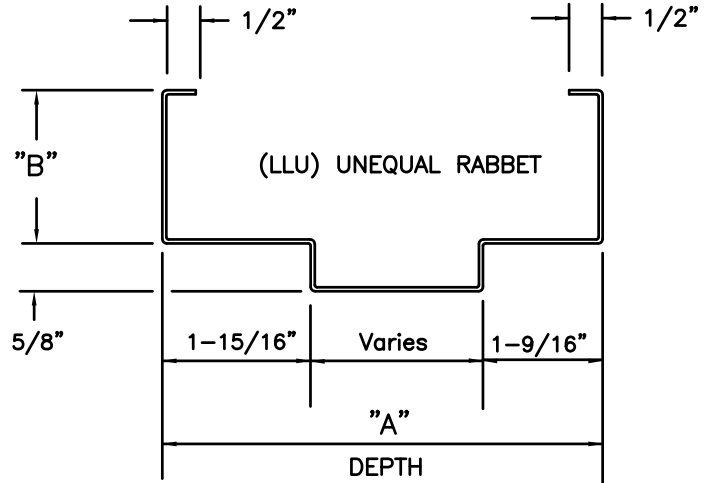
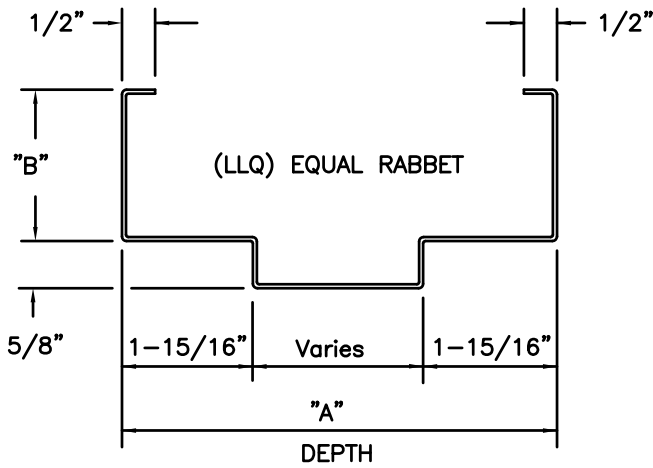
Ceco Door

ASSA ABLOY

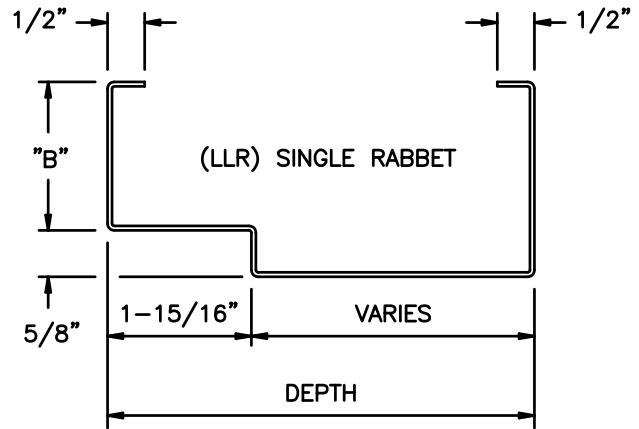
D22-4

SERIES LLQ, LLU, LLR LEAD LINED STEEL FRAMES

FOR 1-3/4" THICK DOORS
STANDARD WALL APPLICATION, HANDED



FRAMES WITH BACKBEND RETURNS SHOULD BE CONSIDERED FOR FINISHED WALL PROTECTION.

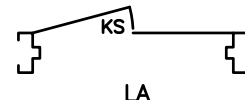
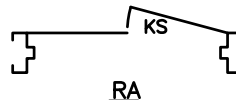
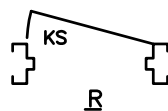
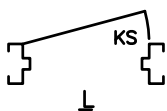


| | |
|--------|-----------------|
| DEPTHS | Dim A |
| | 3-1/2" THRU 14" |

| | |
|-------|------------|
| FACES | Dim B |
| JAMB | 2" |
| HEAD | 2" THRU 4" |

MINIMUM DEPTHS WILL BE LIMITED BY FORMING, LEAD THICKNESS AND HARDWARE.

INSIDE



OUTSIDE

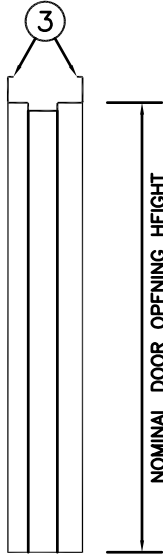
"KS" = KEY SIDE

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

05/06/16

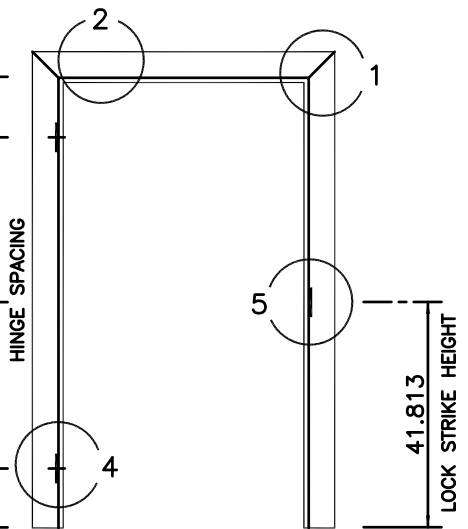
D22--5

Hardware locations shown match Ceco standard doors.



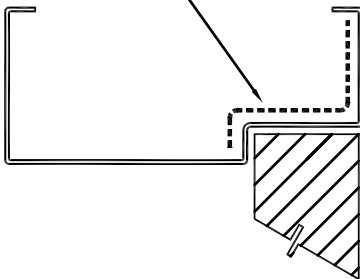
VERTICAL SECTION

| | | | | | | |
|------|-----|-----|-------|-------|-------|-----|
| 10-0 | 9-0 | 8-0 | 7-10 | 7-2 | 7-0 | 6-8 |
| 9 | | | | | | |
| 34 | 34 | 30 | 26 | 25.33 | 25.33 | 34 |
| 34 | 30 | 26 | 25.33 | 34 | 33 | 31 |
| 9 | | | | | | |

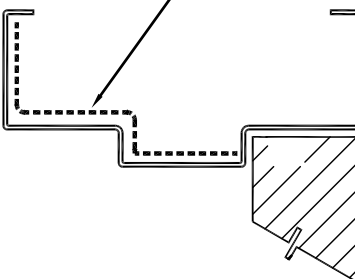


TYPICAL ELEVATION

LH/RH
STANDARD SWING
STANDARD LEAD PLACEMENT



LHR/RHR
REVERSE SWING
STANDARD LEAD PLACEMENT



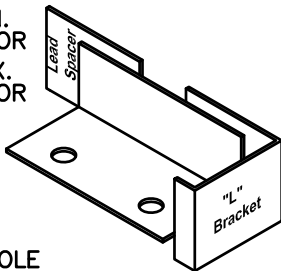
HORIZONTAL SECTION

AS A STANDARD, DOOR HAND WILL DETERMINE IF LEAD IS INSTALLED ON DOOR SIDE (DS) OR OPPOSITE DOOR SIDE OF FRAME. IF LEFT OR RIGHT HAND, LEAD WILL BE PLACED ON DOOR SIDE OF FRAME. IF REVERSE HANDED LEAD WILL BE PLACED ON OPPOSITE DOOR SIDE (ODS) OF FRAME.

STANDARD LEAD LINED
STEEL FLOOR ANCHOR

⑥

14 GAGE MIN.
WELDED ANCHOR
12 GAGE MAX.
WELDED ANCHOR

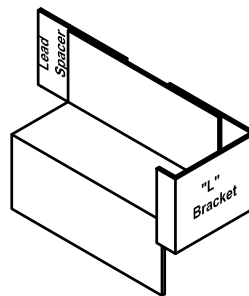


5/16" MIN. HOLE
3/8" MAX. HOLE

LEAD LINED STEEL
METAL STUD ANCHOR

⑥

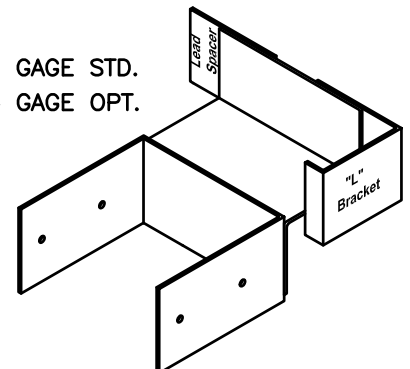
16 GAGE STD.
14 GAGE OPT.



LEAD LINED STEEL
WOOD/METAL STUD ANCHOR

⑥

16 GAGE STD.
14 GAGE OPT.



05/03/16

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

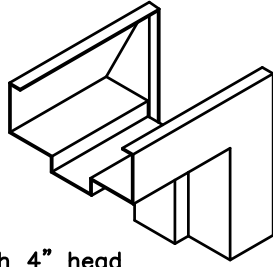


D22-6

WELDED CORNERS – STANDARD

①

CORNER JOINTS ARE MITERED, WELDED AND GROUND SMOOTH.

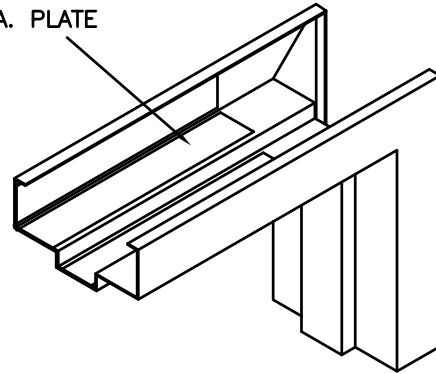


Available with 4" head

CLOSER REINFORCEMENTS

②

12 GA. PLATE

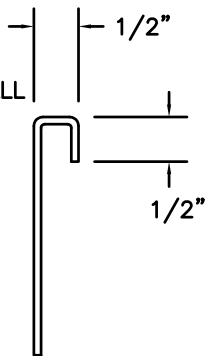


OPTIONAL BACKBEND

③

FRAMES WITH BACKBEND RETURNS, BEFORE DRYWALL APPLICATION

16 or 14 GAGE ONLY



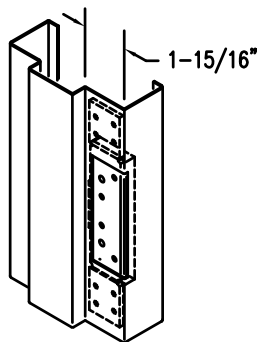
HINGE PREPARATION

④

4-1/2" x .134 or .180
5" x .146 or .190

ANSI A156.7 TEMPLATE

STEEL 7 GAGE REINFORCING



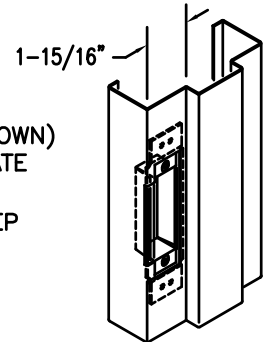
LOCK STRIKE PREPARATION

⑤

UNIVERSAL (4-7/8") (SHOWN)
ANSI A115.1 & 2 TEMPLATE

ALSO AVAILABLE WITH PREP FOR 2-3/4" "T" STRIKE

STEEL 12 GAGE REINFORCING



05/05/16

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

D22-7

STANDARD SIZES NOMINAL DOOR OPENING

| WIDTH | | HEIGHT |
|--------|--------|--------|
| SINGLE | DOUBLE | |
| 2'-0" | 4'-0" | 6'-8" |
| 2'-4" | 4'-8" | 7'-0" |
| 2'-6" | 5'-0" | 7'-2" |
| 2'-8" | 5'-4" | 7'-10" |
| 2'-10" | 5'-8" | 8'-0" |
| 3'-0" | 6'-0" | 8'-0" |
| 3'-4" | 6'-8" | 9'-0" |
| 3'-6" | 7'-0" | 10'-0" |
| 3'-8" | 7'-4" | |
| 3'-10" | 7'-8" | |
| 4'-0" | 8'-0" | |

FIRE DOORS

| |
|---|
| LABELING AGENCIES: • UNDERWRITERS LABORATORY |
| TEST: UL10C, UL10B, UL1784, & NFPA 252 |
| • RATING: 20 MIN, 3/4 HR, 1 HR or 1-1/2 HR |
| • MAX. SIZE: 40 x 90 SINGLE 80 x 90 PAIR |
| • 16, 14 & 12 GA. FRAMES • 18 & 16 GA. DOORS |
| • DESIGNS: F, FG, G, N, & V |
| • LEAD LINED ASTRAGAL REQUIRED ON PAIRS |
| • TEMPERATURE RISE N/A |
| • LOUVERS NOT ALLOWED |
| • LEAD THICKNESS 1/16' THRU 3/16' ALLOWED. |
| <small>Not all ratings are available in all sizes, designs and materials.</small> |

LEAD THICKNESS OPTIONS:
1/32", 1/16", 1/8", 1/4"

**CONSULT FACTORY
FOR THICKER OPTIONS OR FOR
SIZES WIDER THAN 4' OR GREATER
THAN 10' IN HEIGHT.**

PERFORMANCE

| |
|--|
| Physical Endurance Level: |
| Meets ANSI A250.4 Performance Test, |
| Level A (1,000,000 Cycles) (4'0" x 10'0" max. size) |

PRODUCT SPECIFICATIONS:

1-3/4" Thick steel doors shall be by Ceco Door Products. Doors shall conform to the Steel Door Institute guide specification, ANSI A250.8 and NAAMM specifications. See chart below for performance classifications.

LEAD LINED doors are welded seamless design. Face sheets are commercial quality hot-dipped galvanized steel (conforming to ASTM A924 and A653) - see chart below.

Door face sheets are joined at their vertical edge with a center seam the full height of door (welded seamless design). 22 gage steel vertical stiffeners (other gages optional) are placed no more than 6" apart and welded to both face sheets no more than 5" on center along their length. Fiberglass batting insulates the area between stiffeners. The top and bottom door edges are closed flush with 16 gage steel channels welded to both face sheets. Lead is placed between each half of the stiffeners.

Door and Frame Hardware Provisions: Consult hinge manufacturer for weight limitations and hinge recommendations. Mortised butt type hinges will have 7 gage steel reinforcements welded inside the frame throat and door edge. Reinforcements are drilled and tapped for fasteners in accordance with ANSI A156.7. Mortised hinge preparations are handed. Door hinge edges are square. The door lock edge has a standard bevel (1:16). Lock edge is prepared for Gov. series 86, 160/161, or 90 locks in accordance with ANSI A115 (specify which). Strike jambs are prepared for a 4-7/8" universal or 2-3/4" cylindrical strike in accordance with ANSI A115.1 & 2 (specify which). Optional door closer reinforcement plates are 14 gage steel and 12 gage for frames. Lead shielded hardware provided by others. Frame corners are welded. Integral frame stop heights are 5/8". Silencers shall be adhesive back, supplied by others.

Paint: 1-3/4" steel doors & frames 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. Finish colorstyle paint not available from factory.

MATERIAL

| DOOR FACE SHEETS | GALV | | RECOMMENDED DOOR FRAME MATERIAL |
|------------------|------|-----|------------------------------------|
| | A60 | G90 | |
| 18 Gage Steel | STD | OPT | 16 Gage Steel |
| 16 Gage Steel | STD | OPT | 16 or 14 Gage Steel |
| 14 Gage Steel | STD | OPT | 14 or 12 Gage Steel |
| 12 Gage Steel | STD | - | 12 Gage Steel |

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



06/08/16