

BRAND	MODEL
CLOPAY	904, 904U, AX, AXU
IDEAL	C4AL, C4ALU

SHEET:
1 OF 3

REVISIONS						DESCRIPTION
REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:		
00	-	8/11/23	-	JDW	INITIAL RELEASE.	

MODEL 904:
TOP RAIL PER 105008 MIN THK 0.075"
DOUBLE END STILE PER 105010 MIN THK 0.075"
STD BTM RAIL PER 105008 MIN THK 0.075"
CENTER STILE PER 105011 MIN THK 0.062"
INTER. TOP RAIL PER 105012 (WITH FIN) MIN THK 0.062"
INTER. BOTTOM RAIL PER 105014 MIN THK 0.075"

MODEL 904 MADE FROM 6063-T5 ALUMINUM.

SEE PAGE 2 FOR
DIFFERENT JAMB
CONFIGURATIONS.

SECTION 3-3

END STILES FASTENED TO RAILS
WITH FULL LENGTH 5/16" STEEL
RODS AND FLANGE NUTS.

1" OVERLAP
BOTH SIDES.

REINFORCING FIN
ON INTER. TOP
RAILS ANGLE CUT
AT END STILES.

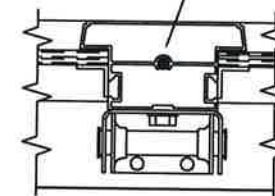
7/16" PUSH-NUT,
ONE PER ROLLER.

12 GA. GALV. STEEL TRACK
BRACKET FASTENED TO WOOD JAMB
WITH ONE 5/16"x1-5/8" WOOD LAG
SCREW PER BRACKET.

1/4"x3/4" SELF
TAPPING SCREWS,
(4) SCREWS PER
HINGE.
1/4"x3/4" SELF
TAPPING SCREWS,
(2) SCREWS PER
HINGE.
14 GA. END HINGES

SECTION 2 - 2

CENTER STILES FASTENED TO
RAILS WITH FULL LENGTH 5/16"
STEEL RODS AND FLANGE NUTS.



14 GAUGE CENTER HINGES
ATTACHED TO INTERM. BOTTOM RAIL
WITH (2) #14x5/8" SMS AND TO
FIN WITH (2) 1/4-20x1" HEX
HEAD MACHINE SCREWS AND NUTS.

TWO
POINT
LOCKING.

SECTIONS PER DOOR HEIGHT	
UP TO 6'0"	3
FROM 6'1" TO 8'0"	4
FROM 8'1" TO 10'0"	5
FROM 10'1" TO 12'0"	6
FROM 12'1" TO 14'0"	7
FROM 14'1" TO 16'0"	8
FROM 16'1" TO 18'0"	9
FROM 18'1" TO 20'0"	10

DOORS 9'3" TO 12'2" SHALL HAVE
AT LEAST (3) PANELS PER SECTION.

3" x 2" x 1/4" ALUMINUM
ANGLE ON TOP SECTION AND
BOTTOM OF BOTTOM SECTION
ATTACHED WITH (1) 1/4"x1"
SELF-TAPPING SCREW PER
STILE LOCATION.

SECTION 1 - 1

ADJUSTABLE TOP ROLLER BRACKET
OF 12 GA. GALV. STEEL
FASTENED WITH (4) #14 x 5/8"
SHT MTL SCREWS.

SEALBOND 105 STRUCTURAL SEALANT
AROUND PERIMETER OF GLAZING.

CARDINAL SEASTORM 9.4 WITH 0.90"
KURAUAY TROSIFOL PVB INTERLAYER.
3/4x3/4x1/8 ALUMINUM RETAINER
ATTACHED WITH #8x1" TEK SCREWS
NTE 10" OC SPACING.

LONG-STEM NYLON 10B
ROLLERS.

14 GA. ROLLER HINGES ATTACHED
WITH (6) 1/4"x3/4" STS.
2" x 3" x 1/4" ALUMINUM
ANGLE, (1) ATTACHED TO
EACH REINFORCING RIB WITH
(2) 1/4" HEX BOLTS AND
FLANGE NUTS AT EACH HINGE
LOCATION AND (2) 3/8"
BOLTS AND NUTS, (1) AT
EACH END.

BOTTOM ROLLER BRACKET
OF 12 GA. GALV. STEEL,
FASTENED WITH (4) #14 x
5/8" SHEET METAL
SCREWS.

2" x 3" x 0.25"
ALUMINUM ANGLE,
6061-T6.

BOTTOM SECTION REINFORCED
WITH A TEMPERED ALUMINUM
EXTRUSION WITH INTEGRAL
RETAINER FOR FLEXIBLE
VINYL ASTRAGAL.

FLEXIBLE VINYL ASTRAGAL.

DESIGN LOADS: +46.0 P.S.F. & -52.0 P.S.F.
TEST LOADS: +69.0 P.S.F. & -78.0 P.S.F.

PART NO.: -

CLOPAY WINDLOAD RATING
W8

Clopay
CORPORATION

8585 Duke Boulevard
Mason, OH 45040 USA
Tel. No. 513-770-4800
Fax No. 513-770-4853

DESCRIPTION: M/N 904 16'2" WIDE DES +46/-52 PSF

DRAWN BY: JDW

DATE: 8/11/23

SCALE: NTS

DWG. B

CHECKED BY: JDW

DATE: 8/11/23

SHEET 1 OF 3

DWG. NO.: 105609

VERSION: IBC/IRC

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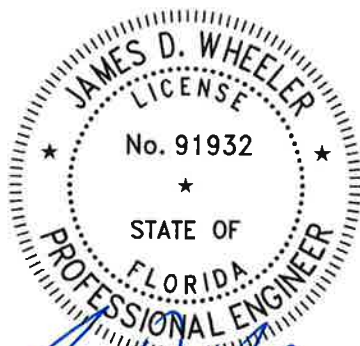
.0 = ±.031
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.000 = ±.005
.0000 = ±.001
Degrees = ±1/2°

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Third Angle
Projection



MANUFACTURING PRODUCT CODE
C-AL2-1F499

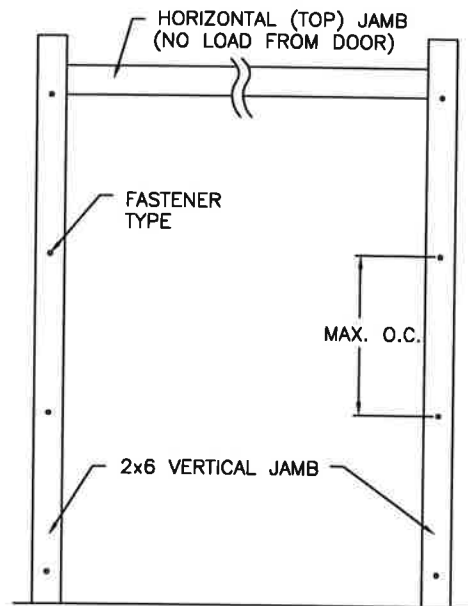


DESIGN ENGINEER:
JAMES D. WHEELER, P.E.
FLORIDA P.E. #91932

BRAND	MODEL
CLOPAY	904, 904U, AX, AXU
IDEAL	C4AL, C4ALU

SHEET:
2 OF 3

REVISIONS						DESCRIPTION
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00	-	-	-	-		SEE REVISION HISTORY ON SHEET ONE.



JAMB TO SUPPORTING STRUCTURE ATTACHMENT

NOTES:

1. ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE TRACK AND THEN FROM THE TRACK TO THE 2x6 VERTICAL SYP (GRADE #2 OR BETTER) JAMBS. NO LOAD FROM THE DOOR IS TRANSFERRED TO THE HORIZONTAL (TOP) JAMB.
2. EACH VERTICAL JAMB SEES A MAXIMUM DESIGN LOAD OF +368 LB. PER LINEAR FOOT OF JAMB.
3. ALL JAMB FASTENERS MAY BE (BUT ARE NOT REQUIRED TO BE) COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
4. A 1/3 STRESS INCREASE FOR WIND LOAD WAS NOT USED IN THE CALCULATION OF ALLOWABLE LOADS FOR ANCHORS AND FASTENERS FOR STEEL, CONCRETE AND MASONRY.

PREPARATION OF JAMBS BY OTHERS

NOTE: THE DESIGN OF THE SUPPORTING STRUCTURAL ELEMENTS SHALL BE THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD FOR THE BUILDING OR STRUCTURE AND IN ACCORDANCE WITH CURRENT BUILDING CODES FOR THE LOADS LISTED ON THIS DRAWING.

2x6 JAMB TO SUPPORTING STRUCTURE ATTACHMENT (NOT TO BE USED FOR ATTACHMENT OF TRACK ANGLE TO 2x6 VERTICAL JAMBS OR SUPPORTING STRUCTURE)

BUILDING TYPE	FASTENER TYPE	MAXIMUM ON-CENTER DISTANCE BETWEEN FASTENERS*	STEEL WASHERS REQUIRED?
BLOCK WALL	1/4" x 1-1/4" EMBED ULTRACON CONCRETE ANCHOR	4-1/4"	NO
GROUT-FILLED BLOCK WALL	1/4" x 1-3/4" EMBED ULTRACON CONCRETE ANCHOR	7-1/4"	NO
2,846 PSI MIN. CONCRETE	1/4" x 1-3/4" EMBED ULTRACON CONCRETE ANCHOR	15-1/4"	NO
2,000 PSI MIN. CONCRETE	1/4" x 1-3/4" EMBED ULTRACON CONCRETE ANCHOR	14-1/4"	NO
2,500 PSI MIN. CONCRETE	3/8" x 1-3/4" EMBED ITW TRUBOLT WEDGE CONCRETE ANCHOR WITH SYP 0.55 SG	14"	1" O.D.
WOOD FRAME (SYP 0.55 SG)	1/2" x 1-1/2" EMBED LAG SCREW WITH 1-3/8" O.D. WASHER	16-3/4"	YES
14 GA MIN. STEEL JAMB	1/4" -14 ITW BUILDEX TEKS SELF-DRILLING FASTENER	7-1/2"	NO
12 GA MIN. STEEL JAMB	1/4" -14 ITW BUILDEX TEKS SELF-DRILLING FASTENER	10-3/4"	NO
1/8" MIN. STEEL JAMB	1/4" -14 ITW BUILDEX TEKS SELF-DRILLING FASTENER	12-3/4"	NO

NOTE: FOR DOORS WITH CONTINUOUS OR REVERSE ANGLE TRACK, THESE VALUES CAN BE USED TO DIRECTLY ATTACH THE TRACK TO THE WALL.

* FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
CLOPAY DOES NOT SUPPLY JAMB ATTACHMENT FASTENERS.
MINIMUM DISTANCE BETWEEN CENTER OF ANCHOR AND EDGE OF CONCRETE BLOCK: 2-1/2", EXCLUDING STUCCO THICKNESS.

JAMES D. WHEELER
LICENSE
No. 91932
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
DESIGN ENGINEER:
JAMES D. WHEELER, P.E.
FLORIDA P.E. #91932

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DRAWN BY: JDW

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SHEET 2 OF 3

DWG. NO.: 105609

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C-AL2-1F499

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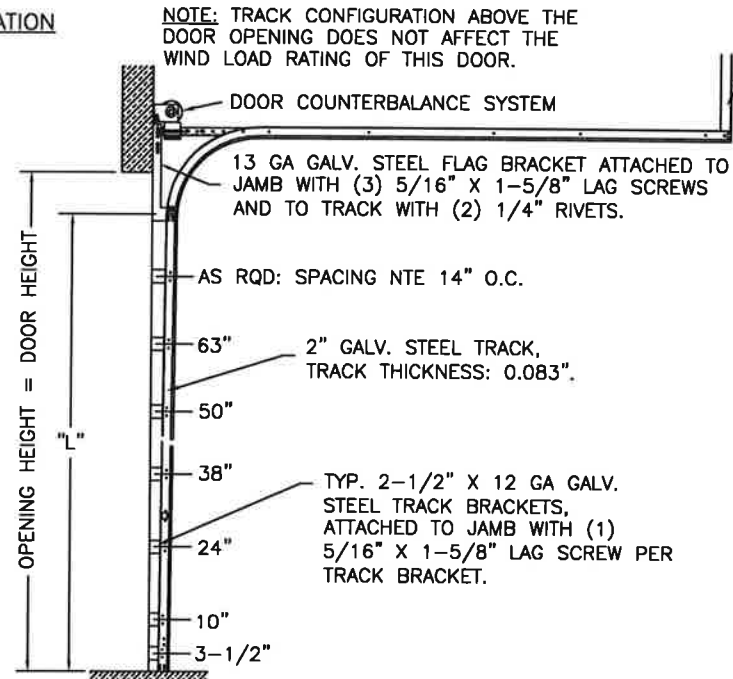
DWG. SIZE B

BRAND	MODEL
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3 OF 3

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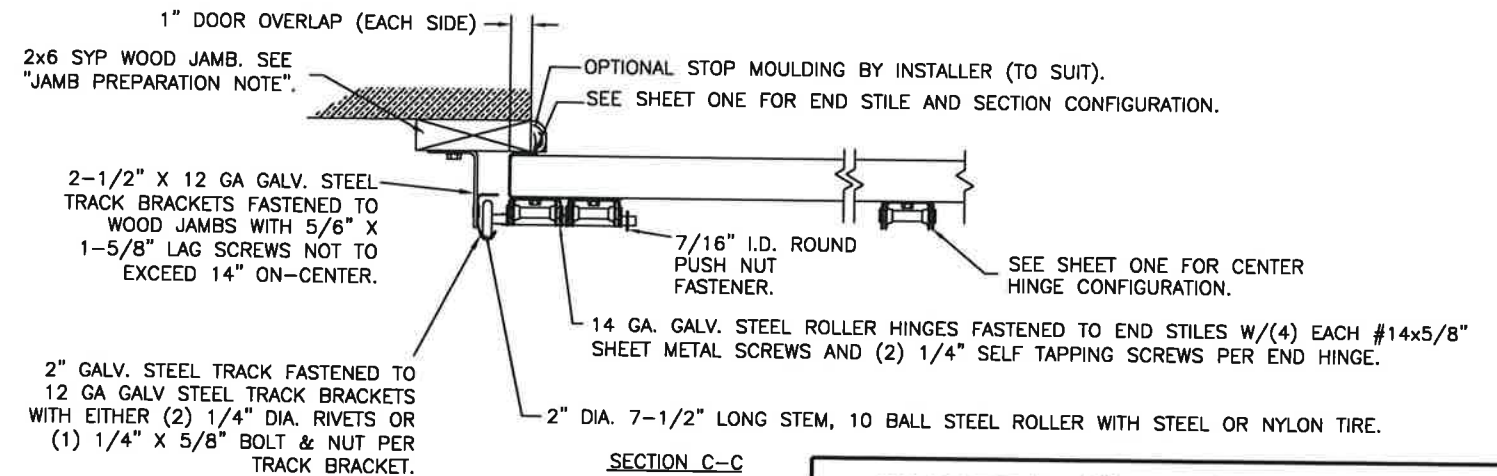
2" TRACK CONFIGURATION



HORIZONTAL TRACK SUPPORT BY DOOR INSTALLER (TO SUIT).

DOOR HEIGHT	"L"
6'-6"	70"
7'-0"	76"
7'-6"	82"
8'-0"	88"
8'-6"	94"
9'-0"	100"
9'-6"	106"
10'-0"	112"
10'-6"	118"
11'-0"	124"
11'-6"	130"
12'-0"	136"
12'-6"	142"
13'-0"	148"
13'-6"	154"
14'-0"	160"
14'-6"	166"
15'-0"	172"
15'-6"	178"
16'-0"	184"

JAMB CONFIGURATION DOORS WITH 2" TRACK.



SECTION C-C

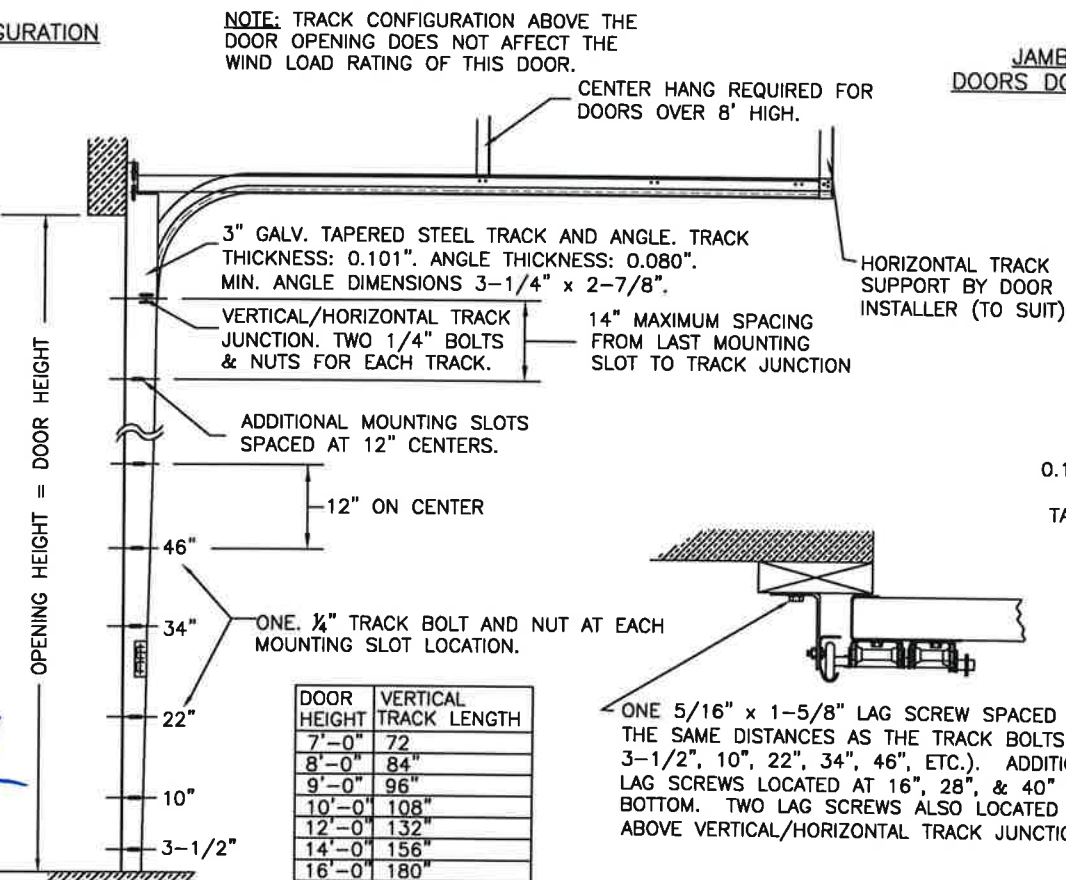
PREPARATION OF JAMBS BY OTHERS.

LHR BRACKET (2-1/2" x 5-3/4" x 12GA) ATTACHED WITH (2) 1/4" x 3/4" SELF TAPPING SCREWS. NOTE THAT LHR BRACKETS ARE ALSO USED WITH "DOUBLE END STILE" AS SHOWN IN ZONE B-3 SHEET 1.

DOUBLE TRACK LOW HEADROOM OPTION (AVAIL. FOR BOTH 2" AND 3" TRACK)

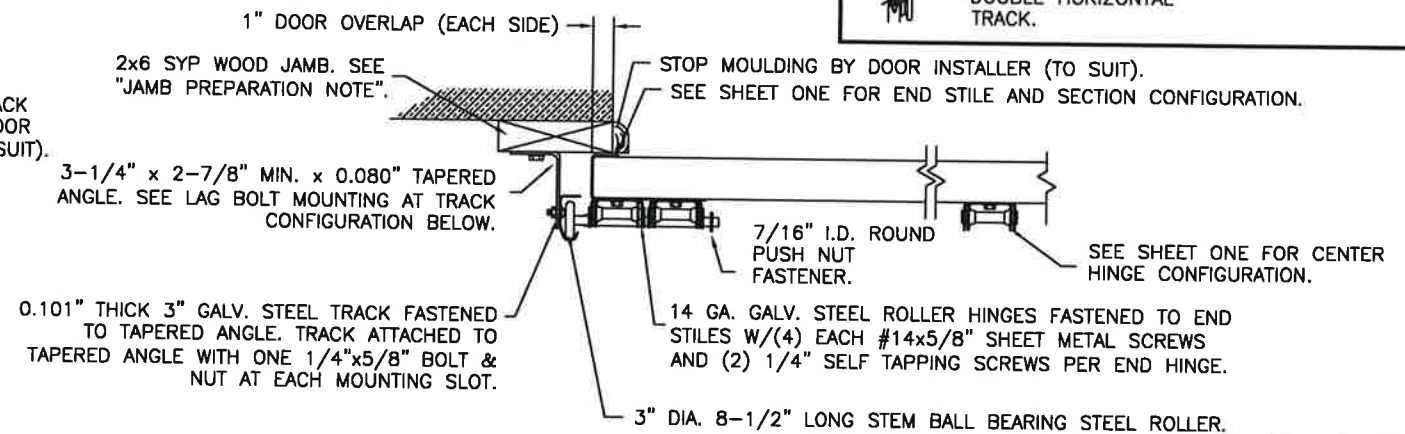


3" TRACK CONFIGURATION



DOOR HEIGHT	VERTICAL TRACK LENGTH
7'-0"	72"
8'-0"	84"
9'-0"	96"
10'-0"	108"
12'-0"	132"
14'-0"	156"
16'-0"	180"

JAMB CONFIGURATION DOORS WITH 3" TRACK.



SECTION C-C

PREPARATION OF JAMBS BY OTHERS.

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