TUNNEL INLET DOORS
FOREWORD:
In order to assure proper performance and smooth functioning of the system the installer
must understand the importance of quality construction and use of straight quality
materials. Attention to details relating to sealing or prevention of air leaks is a must.

The tunnel door opening (framing) should be flat and straight in the vertical and horizontal
planes. Use of tight string line is recommended. The framed opening should be level to
a tolerance of plus $\frac{3}{4}''$ to minus $\frac{3}{4}''$ from end to end. The use of an optical level will be necessary.
Particular attention to installing the 2x4 Hinge Board level is required. Any minor out of level with
the first door section will rapidly become a major problem as following door panels are installed.

Gasket installation to follow framing and caulking. Reference Sh-4 for details installing
gaskets. Prior to nailing gaskets in place the full length to be stretched out and
inspected for any damages or deformations such as twist or tares. Note the bottom "P" gasket
comes as double roll. Therefore it requires separating. See Detail Sh-4.

Door installation is next. Two important points about door installation: First- Take care
not to damage the gaskets. Particularly the bottom "P" gasket. Avoid or minimize sliding door
on top of bottom gasket. Second - Assure the first door section is installed level.

As the door installation continues the weight of the assembled doors will require tying off
for safety. Consider the weight of the doors along with wind or other potential forces that
could over turn the doors. Tie off at 25' or less. See sketch below. Check Winch options for
location of eye hook above door. See Sh-5 bottom page.

Now the door winch and counter weight or spring to be installed. Next the control cable can
now be installed. Note location of control cable eye hooks must not interfer with door rope clamp
range of travel. The door rope eye hooks to be installed, rotated 45° and closed. See Sh-8 & Sh-9.
FRAMING DETAILS
WITH CAULK DETAILS

ROUGH OPENING INTERIOR WALL

2 EA. 3" SCREW AT POST
TOP 2X6 AT POST

TUNNEL DOOR LENGTH -3"
TUNNEL DR. LENGTH -3" BETWEEN 2X4

2X4 OVER 2X6
2X4

(DIMENSION BETWEEN 2X6'S)
45" FOR 4' DOOR
57" FOR 5' DOOR

2X6
2X4

POST (Stud)

2X4

2X4 HINGE BOARD
CAULK
CAULK
CAULK

NOTES:
BEFORE FASTENING FRAMING MEMBERS TO STRUCTURE
VERIFY THEY ARE LEVEL AND STRAIGHT TO TOLERANCES
RECOMMENDED IN "FOREWORD" SECTION Sn.-1.

BOTTOM 2X6 TO BE FASTENED SAME AS THE TOP 2X6
GASKET INSTALLATION:

Before installing the gasket, the gaskets to be rolled out and stretched to remove crimps, twist or other deformations and possible damages. After inspecting and deformations have been dealt with the bottom "P" gasket to be separated. (See sketch below)

The bottom "P" gasket to be placed along edge of the 2x4 hinge board. (See detail below. Check to make sure the start and finish past where the side gasket will start. Fasten the end with a roofing nail approximately 1" from end of bottom gasket. Now fasten the remainder of the bottom gasket with fasteners at ± 10". Do not stretch the gasket while installing.

Next install the side and top gasket. Start at bottom one end. Minor trimming will be required to mate side gasket with the profile of the bottom gasket. A tight interference fit is needed to prevent air leaks. Place roofing nail fastener ± 3/4" from start end of side gasket. Now anchor side gasket up to top of opening. (See gasket cut detail) Place fastener about 3/4" below suit line. At the chalk line compress the gasket with straight edge and make suit through the flat tab. Now slice the bulb as shown. Do not cut completely across the gasket bulb. About 1/4" should be left as a hinge. Now cut out notch from hinge at angle downward about 3/4" to 1". See cut detail.

After rotating the gasket parallel with the bottom of the top 2x6 the top of the gasket should be at the chalk line. Install roofing nail ± 1" from corner and continue across the top to far end. At far end the suit will be made 3/4" past inside edge of 2x4. Again remember not to stretch gasket while nailing. See dimension top left.
DOOR ASSEMBLY:
Each door panel to have minimum 2 (two) rope attachments. At each end of the assembled doors an End Door Rope connection to be installed. Rope attachments should be placed at no more than 60" apart. There are two types of door connections. The Handle and Split bolt type (see detail below).

The Handle type assembly is shown in greater detail on Sh-6. Use the reinforcement plate as template. for locating the 2 ea. 3/8" dia holes through door. Hold the top of the reinforcement plate just below door cap channel interior side and mark locations. Check to make sure plate orientation is correct. For locating the End Door Handle place the reinforcement plate adjacent to the bottom leg top cap channel and inside leg of end channel. See Top Door View. When tightening the carriage bolt nuts make sure not to over compress the fiberglass doors.

Split bolt type rope connection is detailed on Sh 7. The 1/2" diameter holes for the split bolts is located 3" down from top of door. The End Door Split Bolt location will be 3" down from top and 3" from edge of door excluding flange. See Door Elevation detail Sh-7. Again do not deform door by over tightening the nut.

Installing the doors. First door panel to be placed with side of door (excluding 1" flange) 1 1/2" past the opening. Remember the framed opening is 3" less than tunnel door overall length. See Sh-7. Check rope connection type for location of eye hook relative to connection. Note for handle eye hook location is 2" above and 1" off set toward winch end. Verify the first door panel section is installed level. Now hinge fasteners to be installed a. See details below for dimension between top of door and eye hook anchor. Use eye hook for temporary tie off. Allow some slack in the rope to help with "nesting" the doors together. Note over lapping flanges shown on Sh-6 Top Door View. Fasten the door panels together with 3 ea evenly spaced 5/16" dia x 3/4" self tapping Tec screws.

(see Sh-10 for materials supplied)
HANDLE TYPE DOOR ANCHOR

THE REINFORCEMENT PLATE TO BE USED AS TEMPLATE FOR LOCATING HOLES THROUGH DOORS. NOTE LONG SIDE UP, TOP OF REINFORCEMENT PLATE TO BE PLACED AGAINST THE CAP CHANNEL OF DOOR. FOR END DOOR HANDLES PLACE REINFORCEMENT PLATE AGAINST TOP CHANNEL AND SIDE CHANNEL ALONG EDGE OF DOOR.

5/16" Tec. 3 EA.
OVER LAP FLANGE

TOP DOOR VIEW

REINFORCEMENT PLATE TYPICAL AT DOOR HANDLES

END DOOR HANDLE

EYE HOOK WITH PULLEY, OFF SET 1" TO WINCH END FROM CENTER OF HANDLE. PULLEY NOT PROVIDED.

2X6 TOP FRAMING MEMBER

3 EA. 5/16" X 3/4" Tec SELF TAPPING, INSTALL TO INTERIOR SIDE

3 HINGES PER DOOR FOR FULL LG. DOOR PANEL

2X4 HINGE BOARD

HANDLE TYPE ASSEMBLED DOOR ELEVATION

CAUTION DO NOT COMPRESS DOOR WHEN TIGHTENING THE LOCK NUTS

NUTS W/ NYLON INSERTS

"S" HOOK PULLEY

CONTROL CABLE (MAIN CABLE) EYE HOOK

CENTER EYE BOLT

TOP DOOR

REINFORCEMENT PLATE

CAP CHANNEL

Eye hooks, ropes, cables, pulleys not provided

REINFORCEMENT PLATE BACK SIDE

DOOR HANDLE ASSEMBLY

CENTER EYE HOOK

CENTER HANDLE

REINFORCEMENT PLATE

PULLEY

SUPPORT CABLE

ROPE TO CONTROL CABLE

TOP DOOR

END DOOR HANDLE

ANCHOR END

1" CENTER EYE HOOK

1" CENTER HANDLE

REINFORCEMENT PLATE
SPLIT BOLT TYPE CONNECTION

1/8" DIA. NYLON ROPE IN SLOT

Eye hooks, ropes, cables pulleys not provided

2" O.D. WASHER EACH SIDE

DRILL 1/2" DIA. HOLE FOR SPLIT BOLT ROPE CONNECTION

3"

END DOOR HANDLE

SET DOOR STRAIGHT DOWN ON GASKET, AVOID SLIDING.

CENTER EYE BOLT

TOP DOOR

+3/4"

EYE HOOK FOR MAIN CABLE

ROTATE EYE HOOK ABOUT 45 TOP TOWARD WINCH END

1/8" ROPE AGAINST DOOR CAP CHANNEL

Hinge Board

TIE LOOP AT END TO HELP WITH ROPE TENSION ADJUSTMENT

Door Installation

ALL DOOR EYE HOOKS IN LINE WITH SPLIT BOLT & ROTATE TOP 45°

END DOOR SPLIT BOLT

ANCHOR END

WINCH END

END DOOR SPLIT BOLT

90° TYPICAL DOOR PANEL WIDTH

3 EA. 5/16" X 3/4" Tec SELF TAPPING, INSTALL TO INTERIOR SIDE

2X8 TOP FRAMING MEMBER

2X4 HINGE BOARD

1/4" MAXIMUM
WINCH END DETAILS FOR WALL MOUNTED WINCH

WINCH RATIO TO BE 1 TO 1

IT IS CRITICAL CONTROL CABLE EYE HOOK PLACEMENT ALLOWS FOR SUFFICIENT CABLE TRAVEL TO OPEN DOORS DISTANCE SHOWN ON SHEET 2. E.G. 48" FOR 4' DOORS AND 60" FOR 5' DOORS

DOOR ROPE CLAMP W/2 ROPES MINIMUM 3 ROPES WHERE END DOOR HANDLE EXIST.

DOOR ROPE CABLE CLAMPS ABOUT 90" APART

1. CABLE CLAMP FOR 1" TO 3" HANDELS

5'-6" FOR 5' DOORS
4'-8" FOR 4' DOORS

3 ROPE CLAMP

PULLY BRACKET TO ANCHOR CABLE

CONTROL CABLE EYE HOOK

1" OFF SET

EYE HOOK

TO CONTROL CABLE

PULLEY

"S" HOOK

NOTE: FOR WALL MOUNTED WINCH SYSTEMS ONLY ONE (1) PULLEY IS REQUIRED.

SECTION "A"

DOOR EYE HOOK

FOR SPLIT BOLT CONNECTION

SEE SHEET 5

SECTION "B"
**ANCHOR END**

Following the routing of the control cable and clamping the door ropes to control cable all the door ropes to be adjust for smooth straight door action.

The control cable to be sufficiently tensioned to allow for less than 1” sag between eye hooks.

After adjusting ropes and tension of control cable all eye hooks to have gap reduced by closing with "channel locks".

<table>
<thead>
<tr>
<th>min. 49” for 4’ dr.</th>
<th>pulley bracket fastened to 2x6 w/4 ea. 3/8ø x 2” lag screws</th>
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<tbody>
<tr>
<td>min. 61 for 5’ dr.</td>
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eye hook for control cable

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<tr>
<th>counter weight cable</th>
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<tr>
<td>25” for 4’ doors</td>
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<tr>
<td>32” for 5’ doors</td>
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long extension spring

min. 160 lb. tension.

with 33” extension for 5’ doors or 26” extension for 4’ doors.

Items provided by Reeves Supply Co. include but not limited to: Door panels, Door rope connections, Gaskets, Hinges, Tec Screws, Installation Manual

Items Not Provided Include but not limited to: winch, pulley clips, pulley, eye hooks, lag screws, regular nuts and bolts, hand winch, nails "U" bolts, lumber. cable, cable clamps 1/8” dia. rope, sealing caulk, springs.