

VOX LEARNING INSTALLATION GUIDE

GENERAL NOTES : PLEASE READ BEFORE INSTALLING VOX LEARNING PRODUCT

THESE INSTALLATION INSTRUCTIONS ARE A GENERAL OVERVIEW OF HOW TO INSTALL VOX LEARNING PRODUCT. LOCAL CONDITIONS MAY VARY FROM THOSE LISTED IN THESE INSTRUCTIONS.

NENKAMPER WILL ENDEVOR TO PROVIDE THE INSTALLER, ALL RELEVANT AVAILABLE INFORMATION ABOUT SITE SPECIFIC CONDITIONS, HOWEVER THESE DRAWINGS INCORPORATE BUILDING INFORMATION PROVIDED TO NIENKAMPER BY OTHERS (THE OWNER/ARCHITECT/CONTRACTOR.). NIENKAMPER ASSUMES THAT SITE INFORMATION SUPPLIED TO NIENKAMPER BY OTHERS (THE OWNER/ARCHITECT/CONTRACTOR), THAT ARE ASSOCIATED WITH THIS PROJECT ARE DEEMED RELIABLE FOR CURRENT SITE CONDITIONS.

SITE CONDITIONS AND MEASUREMENTS THAT DIRECTLY AFFECT NIENKAMPER PRODUCT OR ITS INSTALLATION OF THAT PRODUCT, MUST BE FIELD VERIFIED BY THE INSTALLERS.

PRIOR TO INSTALLATION, APPROVED INSTALLER MUST REVIEW SITE MEASUREMENTS AND ASSEMBLY DETAILS TO ENSURE PROPER INSTALLATION.

REVISIONS AND CHANGES, ALTERATIONS OR DISCREPANCIES TO SITE DIMENSIONS AND CONDITIONS MUST BE FORWARDED TO NIENKAMPER FOR REVIEW AND CONSIDERATION IN RESPECT TO CONTRACTURAL REQUIREMENTS.

IMPORTANT NOTES : PLEASE READ BEFORE STARTING INSTALLATION

BEFORE STARTING, REVIEW DRAWINGS SUPPLIED TO LOCATE ALL TOPS AND MODESTY PANELS SUPPLIED.

- EACH ROW IS NUMBERED FROM FRONT OF LECTURE HALL TO BACK, ROW # 1 BEING AT THE FRONT OF THE ROOM.
- EACH TOP IS NUMBERED IN SEQUENCE ALONG EACH ROW FROM LEFT TO RIGHT IN PLAN VIEW (SEE DRAWING SUPPLIED)
- TOPS WILL BE DESIGNATED FOR EXAMPLE R- 1 / T-1 (ROW- 1 / TABLE-1) ON UNDERSIDE OF ALL TOPS.
- EACH MODESTY PANEL IS MARKED FOR EACH TOP IN EACH ROW FROM LEFT TO RIGHT ON TOP EDGE.(SEE IMAGE 6F)
- STANDARD HEIGHT TABLES ARE 29 " HIGH , A.D.A. HEIGHT TABLES ARE 31 ½" HIGH.
- STANDARD OR ADA BASES ARE SHIPPED WITH COVER PANELS REMOVED. PLACE FULL HEIGHT COVER PANELS ON ENDS OF ROWS OR VISABLE AISLE LOCATIONS. (SEE IMAGE 8A # 8B)
- STANDARD OR ADA BASES FACING INSIDE OR IN THE MIDDLE OF THE ROW GET A PARTIAL HEIGHT BASE PANEL. (SEE IMAGE 8B)

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SECTION

- 1) - FASTEN BASE TO END OF ROW
- 2) - JOINING TOPS TOGETHER
- 3) - ATTACHING A.D.A. WORKTOPS
- 4) - BOLT BASES TO FLOORS
- CONCRETE AND RAISED FLOORS
- 5) - ATTACH VOX FORUMS TO TOPS
- 6) - ATTACH MODESTY PANELS TO TOPS
- 7) - ATTACH SHROUD OR PENCIL STOP
- 8) - INSTALLING BASE COVER PANELS
- 9) - CORE DRILL AND WIRING INFO

START AT BEGINNING OF A ROW
 ATTACH BASE TO UNDERSIDE OF END TOP
 NOTE THAT SQUARE END OF TOP PLATE
 IS FACING USER SIDE. ATTACH NEXT BASE TO $\frac{1}{2}$ OF
 THE JOINT. FLIP TOP OVER WITH BASES ATTACHED
 AND POSITION IN PLACE.

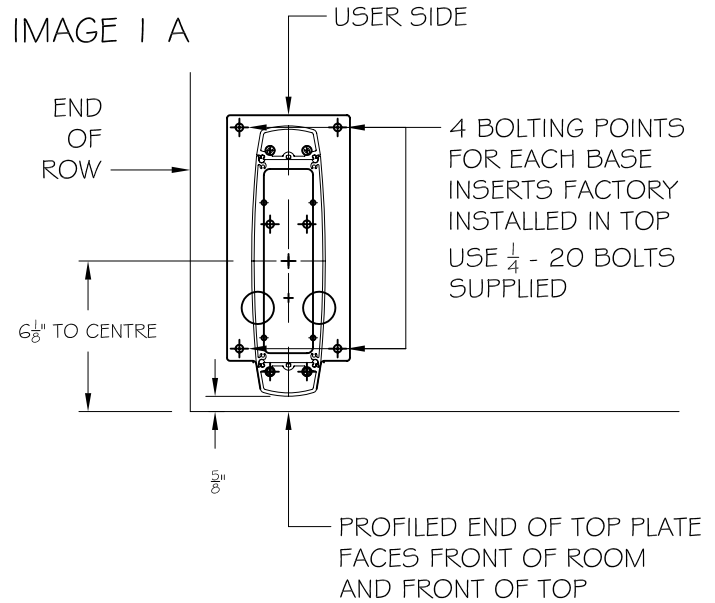
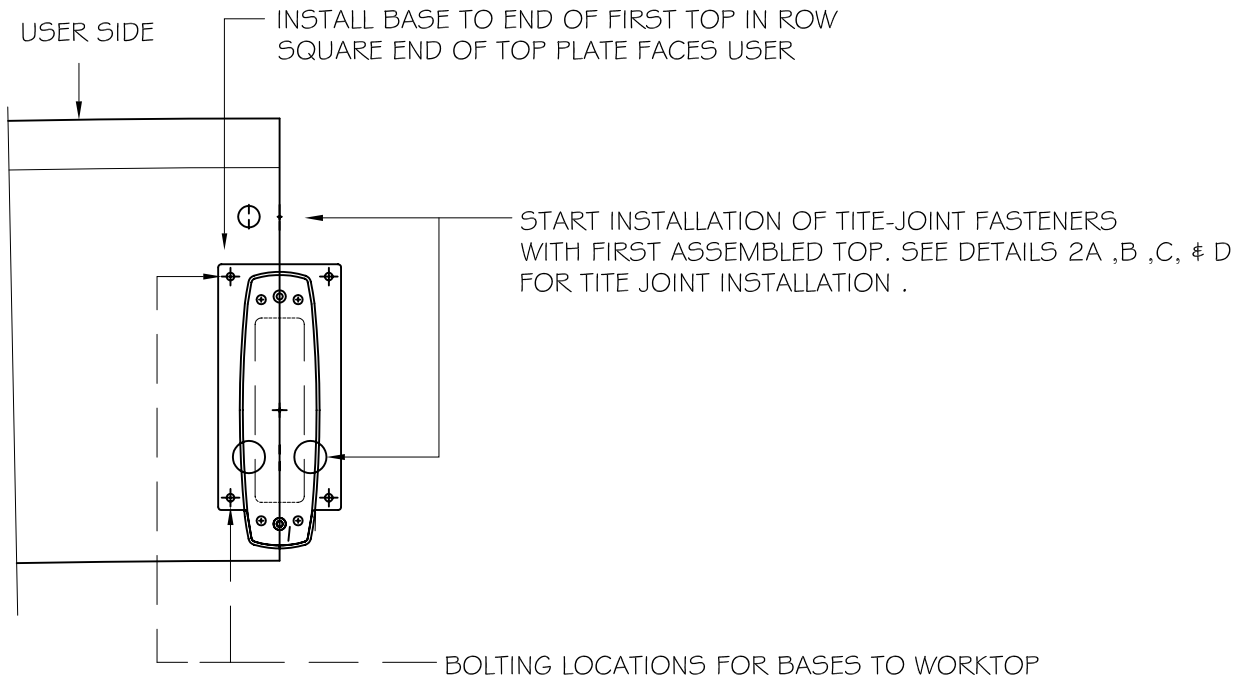


IMAGE # 1 B



TITE JOINT HARDWARE INSTALLATION

1) INSERT BARREL INTO HOLE, INSERT THREADED STEM INTO HOLE ON END OF TOP AND THREAD INTO BARREL (IMAGE 2 A) .

2) LEAVE STEM EXTENDED $1\frac{1}{8}$ " BEYOND HOLE THEN JOIN TWO TOPS TOGETHER. (IMAGE 2 B) .

3) SLIDE IN RING TO CAPTURE STEM IN HOLE TIGHTEN BARREL END WITH TIGHTNING ROD PROVIDED. (IMAGE 2 C) .

4) BOLT TABLES TO BASE FROM UNDERSIDE WITH BOLTS PROVIDED (IMAGE # 2 D) .

5) REPEAT FOR REST OF TOPS IN ROWS, AND FOR ALL ROWS IN AUDITORIUM .

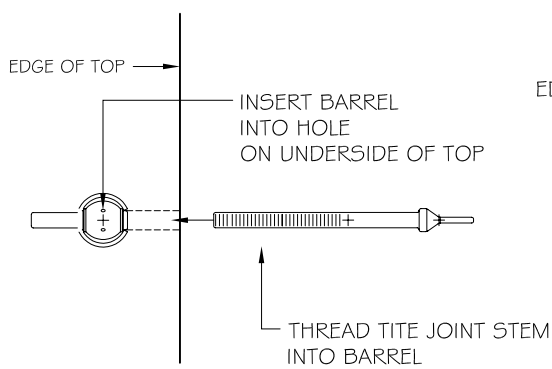


IMAGE # 2 A

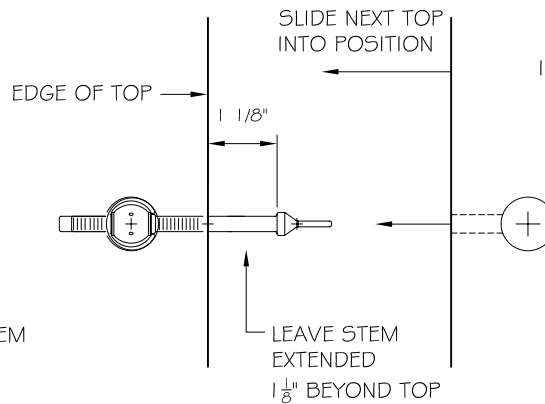


IMAGE # 2 B

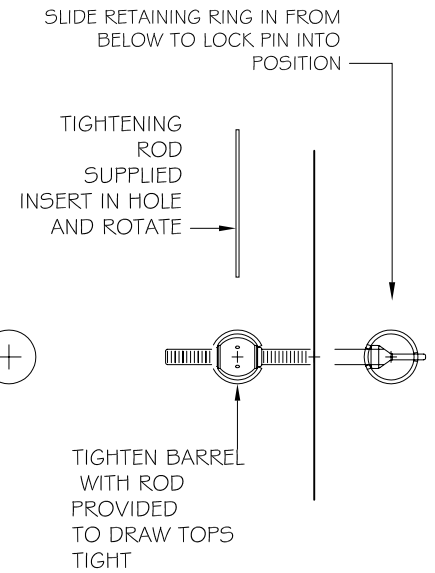


IMAGE # 2 C

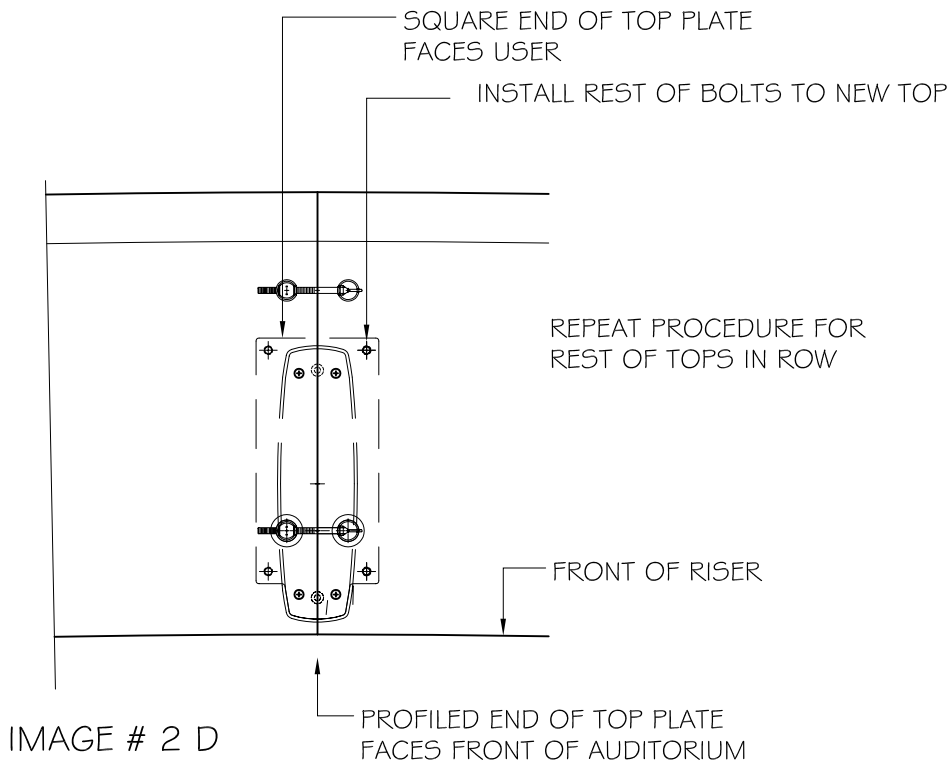
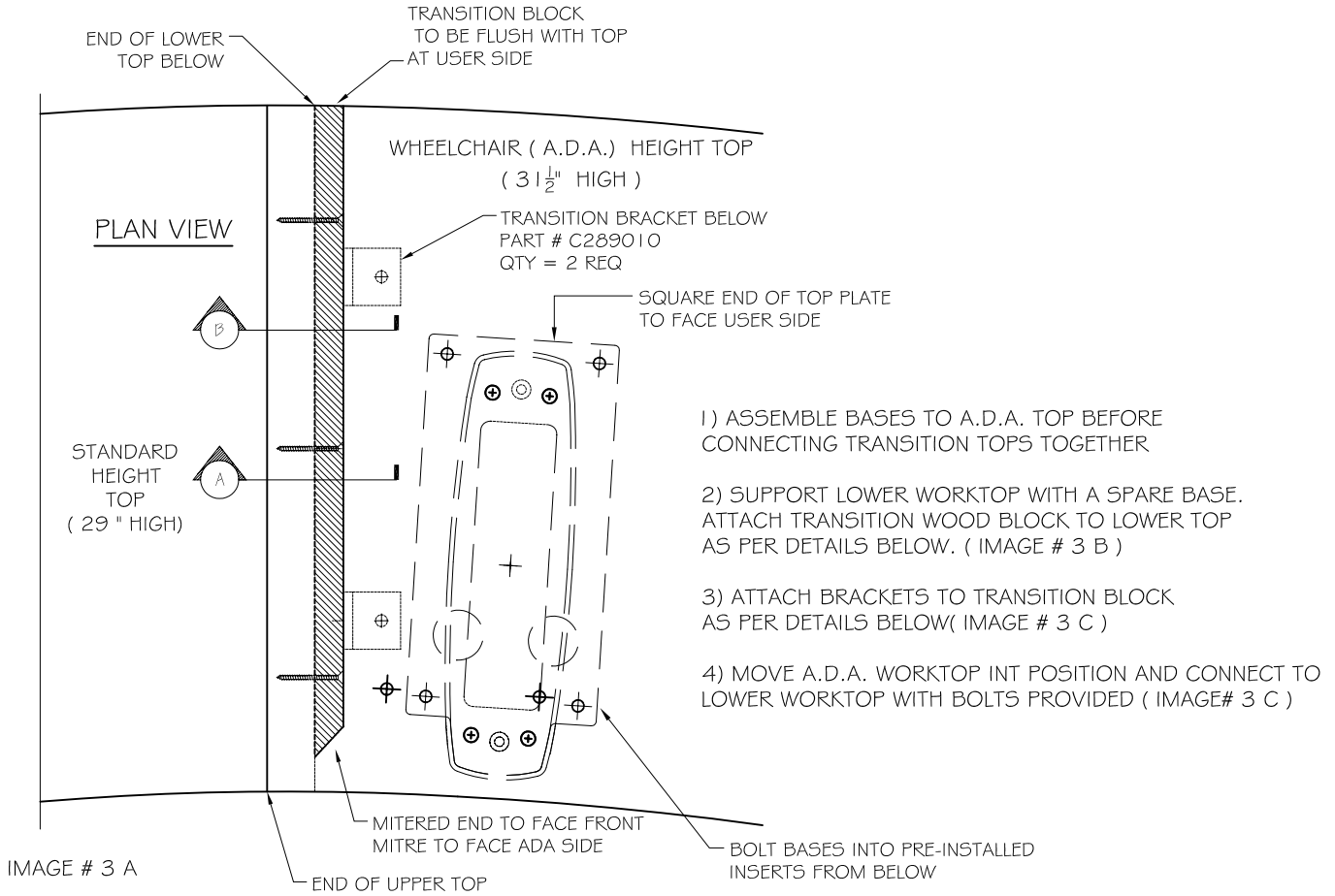
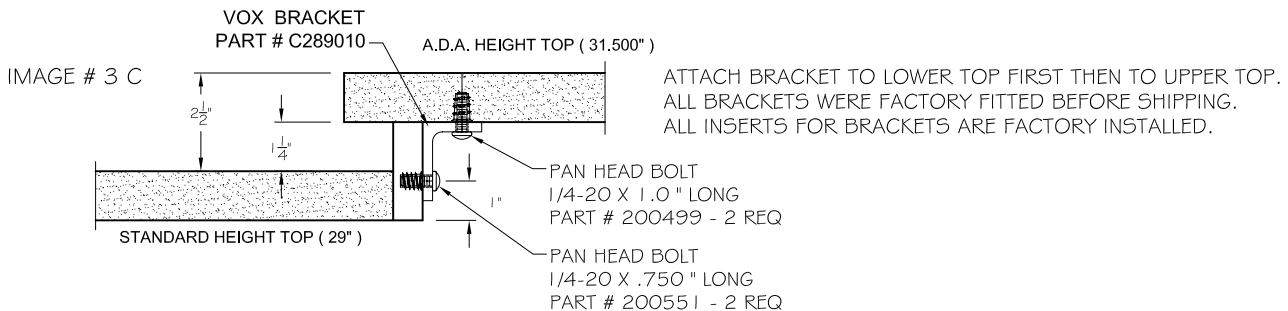
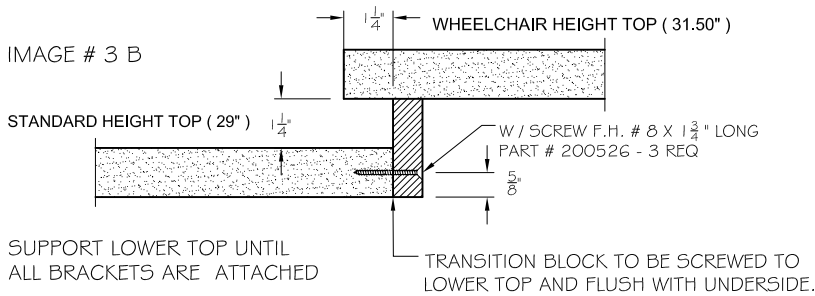


IMAGE # 2 D



ATTACHING TRANSITION BLOCK TO LOWER TOP



nienkämper VOX LEARNING

PLEASE REFER TO DRAWINGS SUPPLIED FROM NIENKAMPER IN LOCATING THE CRITICAL BASE LOCATIONS.

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ANCHOR BOLTS REQUIRED TO BOLT THE BASES TO THE FLOORS MUST BE SUPPLIED BY THE INSTALLER.

NIENKAMPER HAS SUGGESTED THE HILTI SERIES OF BOLTS FOR FIELD INSTALLATION INTO CONCRETE SLAB AND SLAB ON GRADE SURFACES, WHICH WE FEEL WILL PROVIDE THE SUREST MEANS OF CONNECTION TO THE FLOOR SURFACE. HOWEVER THE INSTALLER MAY WANT TO SUBSTITUTE FOR ANOTHER LOCAL MANUFACTURER OF FLOOR CONNECTORS IF THEY SO WISH.

NIENKAMPER DOES NOT WARRANTY ANY SPECIFIC HARDWARE MANUFACTURER OR PRODUCT BUT RECOMMENDS THE HILTI FASTENING SYSTEM FOR INFORMATIONAL PURPOSES ONLY AND STRICTLY AS A COURTESY TO THE OWNER/ARCHITECT/CONTRACTOR. THIS IS IN NO WAY AN ASSUMPTION OF DUTY ON THE PART OF NIENKAMPER RELATIVE TO LOCAL CODE INTERPRETATION AND REQUIREMENTS.

- 1) - BASES SHOULD BE ATTACHED TO WORKTOPS BEFORE BOLTING TO FLOOR. COVER PANELS ON BASES SHOULD BE REMOVED BEFORE STARTING.
- 2) - LOCATE BRACKET IN BASE CAVITY PLATE WHERE IT BEST FITS IN THE OPENING
- 3) - MARK HOLE AT FLOOR AND DRILL HOLE AS REQUIRED
- 4) - FOR A 3" HILTI BOLT, HOLE DEPTH NEEDS TO BE $\frac{1}{2}$ " DEEPER THAN BOLT INTO FLOOR. FOR OTHER BOLTS PLEASE REFER TO MANUFACTURERS SUGGESTED INSTALLATION INSTRUCTIONS.

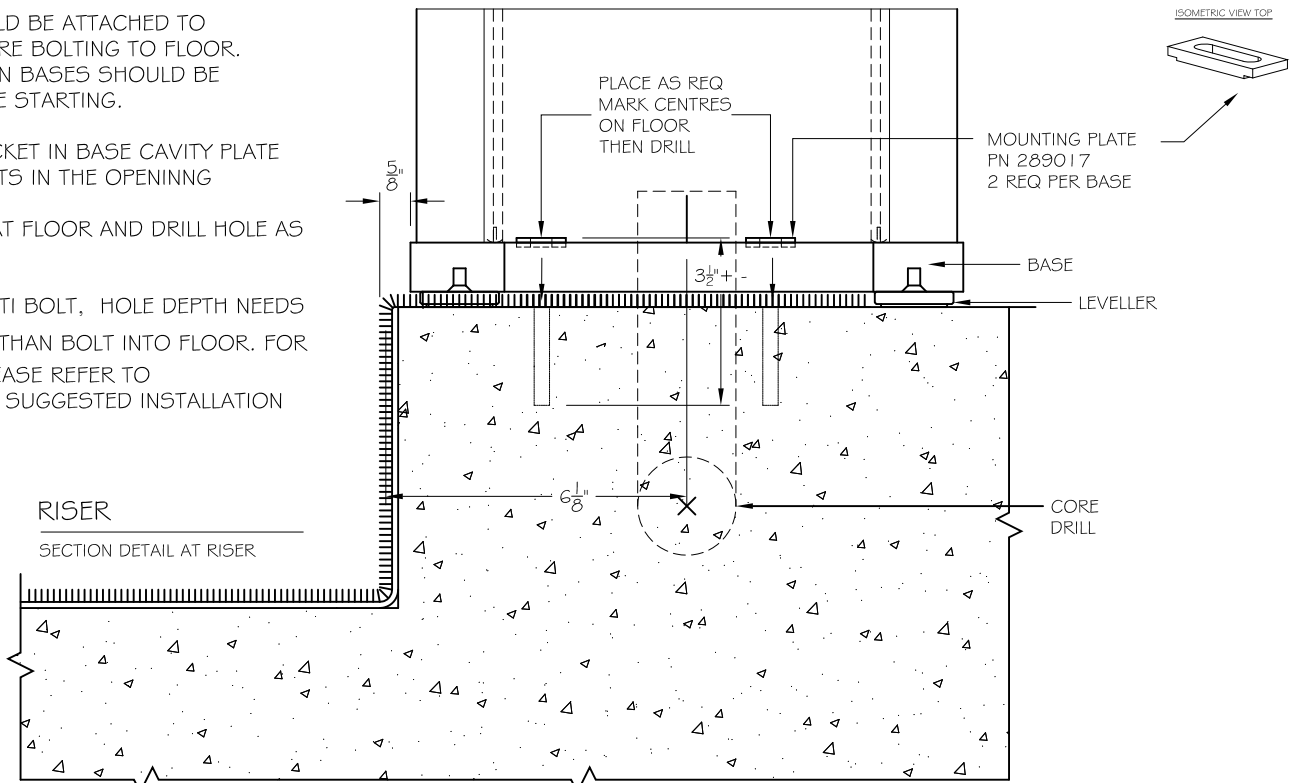
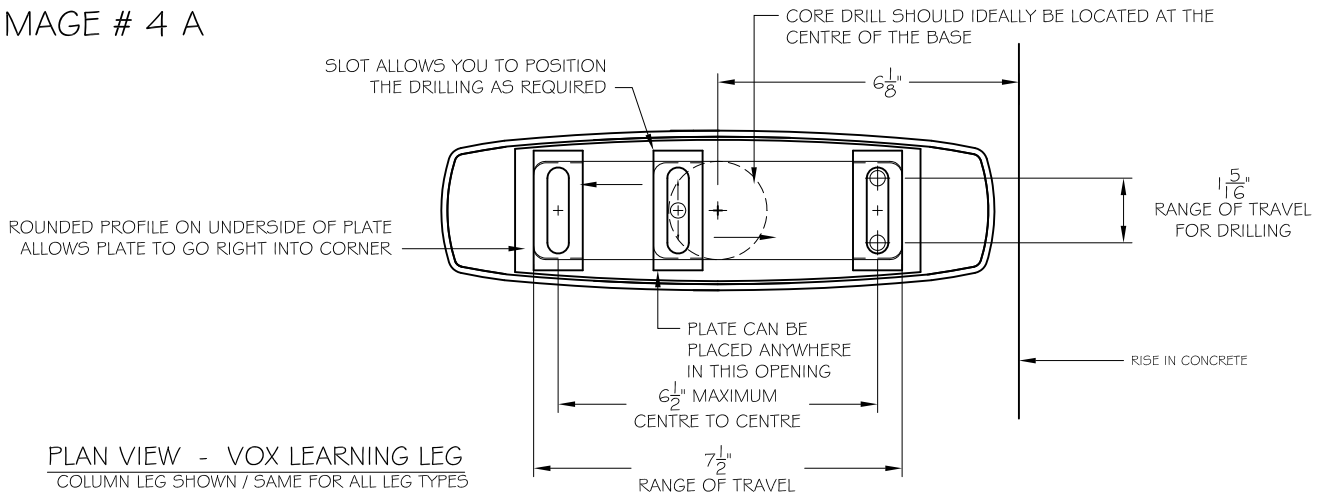


IMAGE # 4 A



PLAN VIEW - VOX LEARNING LEG
COLUMN LEG SHOWN / SAME FOR ALL LEG TYPES

IMAGE # 4 B

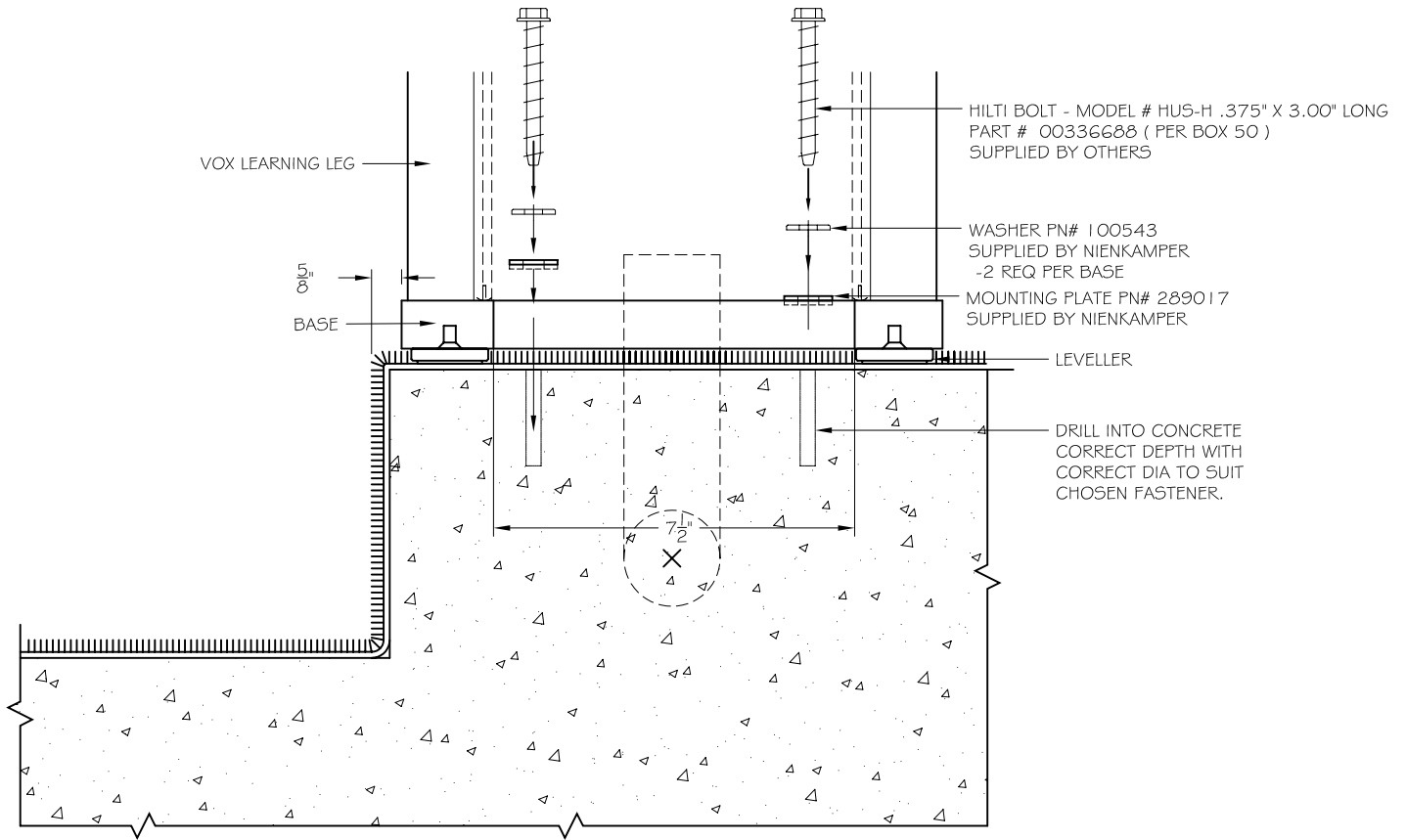
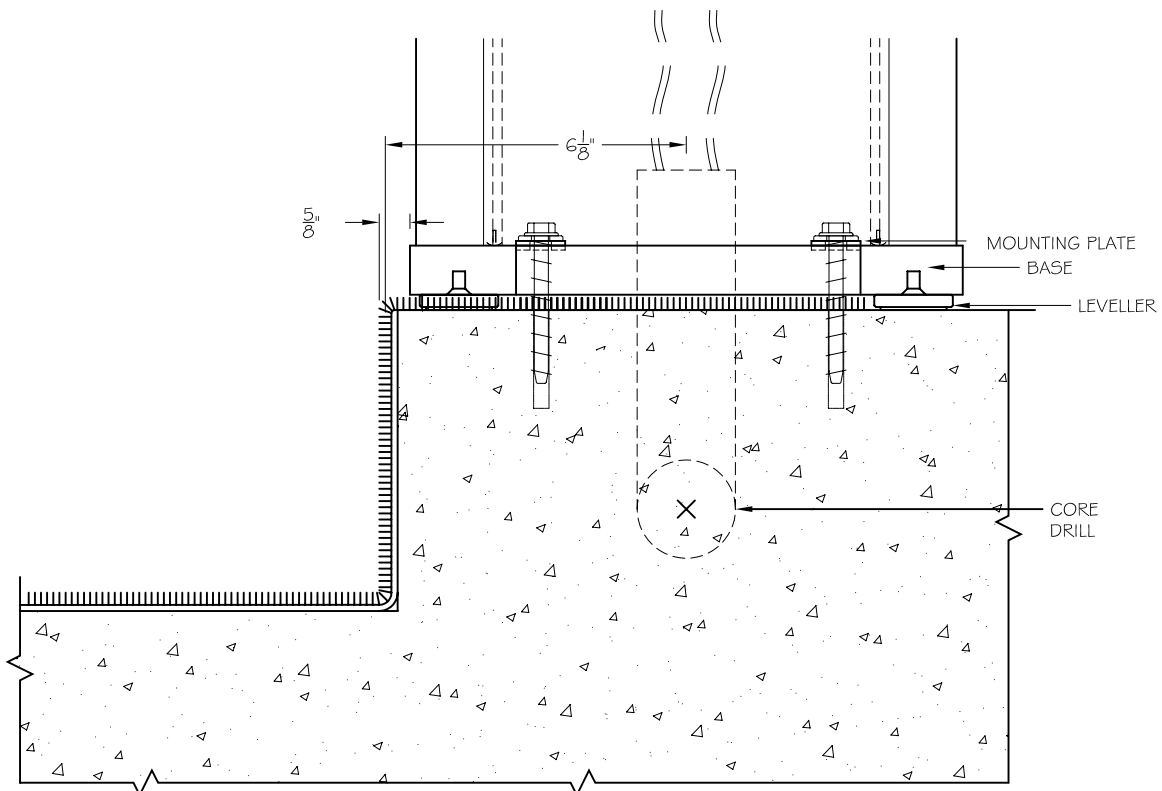


IMAGE # 4 C



FULLY INSTALLED BASE

IMAGE # 4 D

PLEASE REFER TO DRAWINGS SUPPLIED FROM NIENKAMPER IN LOCATING THE CRITICAL BASE LOCATIONS

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ANCHOR BOLTS REQUIRED TO BOLT THE BASES TO THE FLOORS MUST BE SUPPLIED BY THE INSTALLER. NIENKAMPER HAS SUGGESTED THE " AMERIBEST " SERIES OF TUMBLE / TOGGLE BOLTS FOR FIELD INSTALLATION ON HOLLOW OR RAISED STRUCTURAL FLOORS WHICH WE FEEL WILL PROVIDE THE SUREST MEANS OF CONNECTION TO THE RAISED FLOOR SURFACE. HOWEVER THE APPROVED INSTALLER MAY WANT TO SUBSTITUTE FOR ANOTHER LOCAL MANUFACTURER OF FLOOR CONNECTORS IF THEY SO WISH.

NIENKAMPER DOES NOT WARRANTY ANY SPECIFIC HARDWARE MANUFACTURER OR PRODUCT BUT RECOMMENDS THE " AMERIBEST " FASTENING SYSTEM FOR INFORMATIONAL PURPOSES ONLY AND STRICTLY AS A COURTESY TO THE OWNER/ARCHITECT/CONTRACTOR. THIS IS IN NO WAY AN ASSUMPTION OF DUTY ON THE PART OF NIENKAMPER RELATIVE TO LOCAL CODE INTERPRETATION AND REQUIREMENTS.

- 1) - BASES SHOULD BE ATTACHED TO WORKTOPS BEFORE BOLTING TO FLOOR. COVER PANELS ON BASES SHOULD BE REMOVED BEFORE STARTING.
- 2) - LOCATE BRACKET IN BASE CAVITY PLATE WHERE IT FITS BEST IN THE OPENING
- 3) - MARK HOLE AT FLOOR AND DRILL HOLE DIA AS REQUIRED.
- 4) - DETERMINE FLOOR THICKNESS THEN SELECT AVAILABLE " AMERIBEST TUMBLE TOGGLE BOLT " OR OTHER SUITABLE EQUIVELLENT. PLEASE REFER TO MANUFACTURERS SUGGESTED INSTALLATION INSTRUCTIONS FOR PROPER INSTALLATION PROCEDURE.

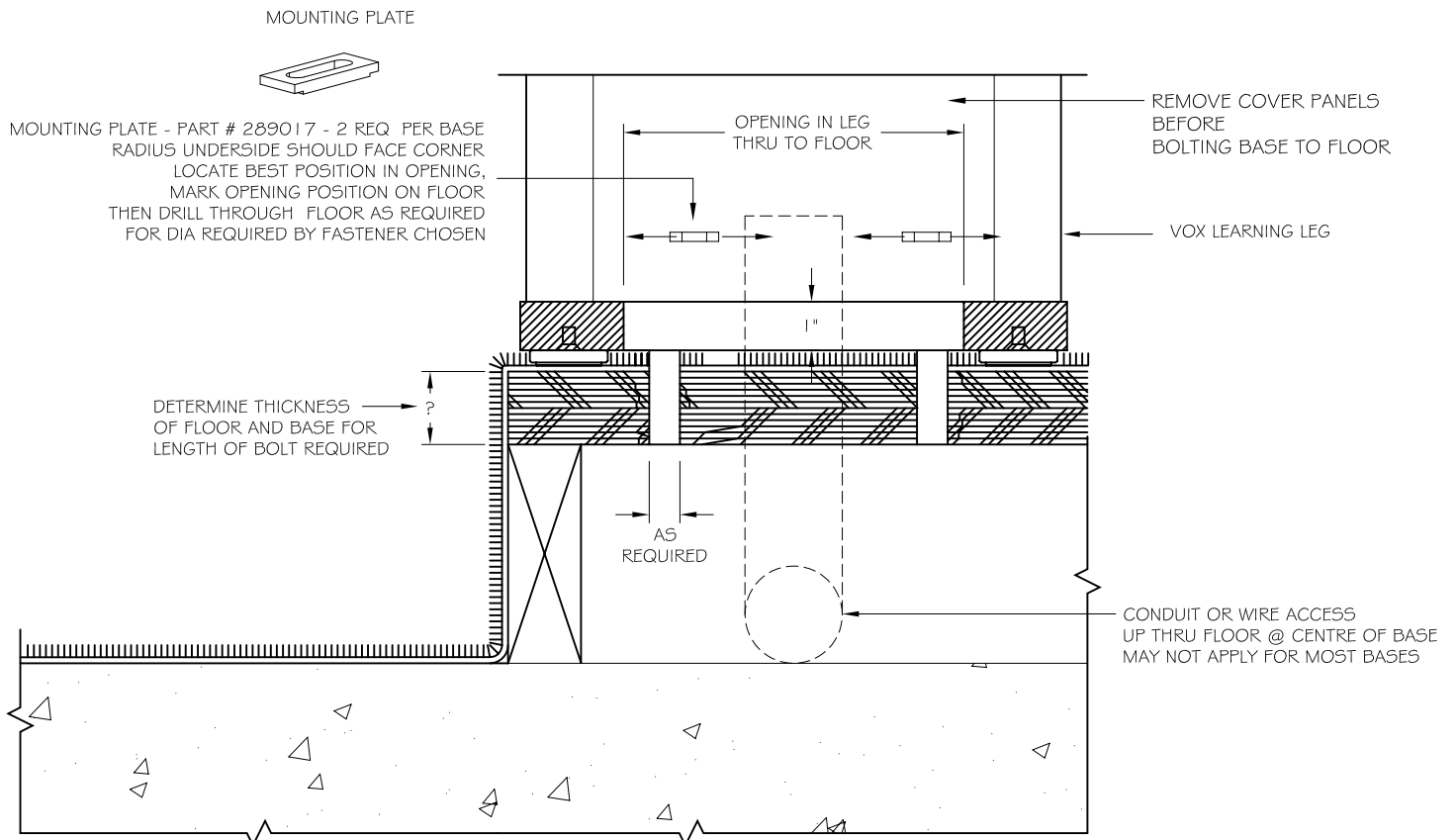


IMAGE # 4 E

nienkämper VOX LEARNING

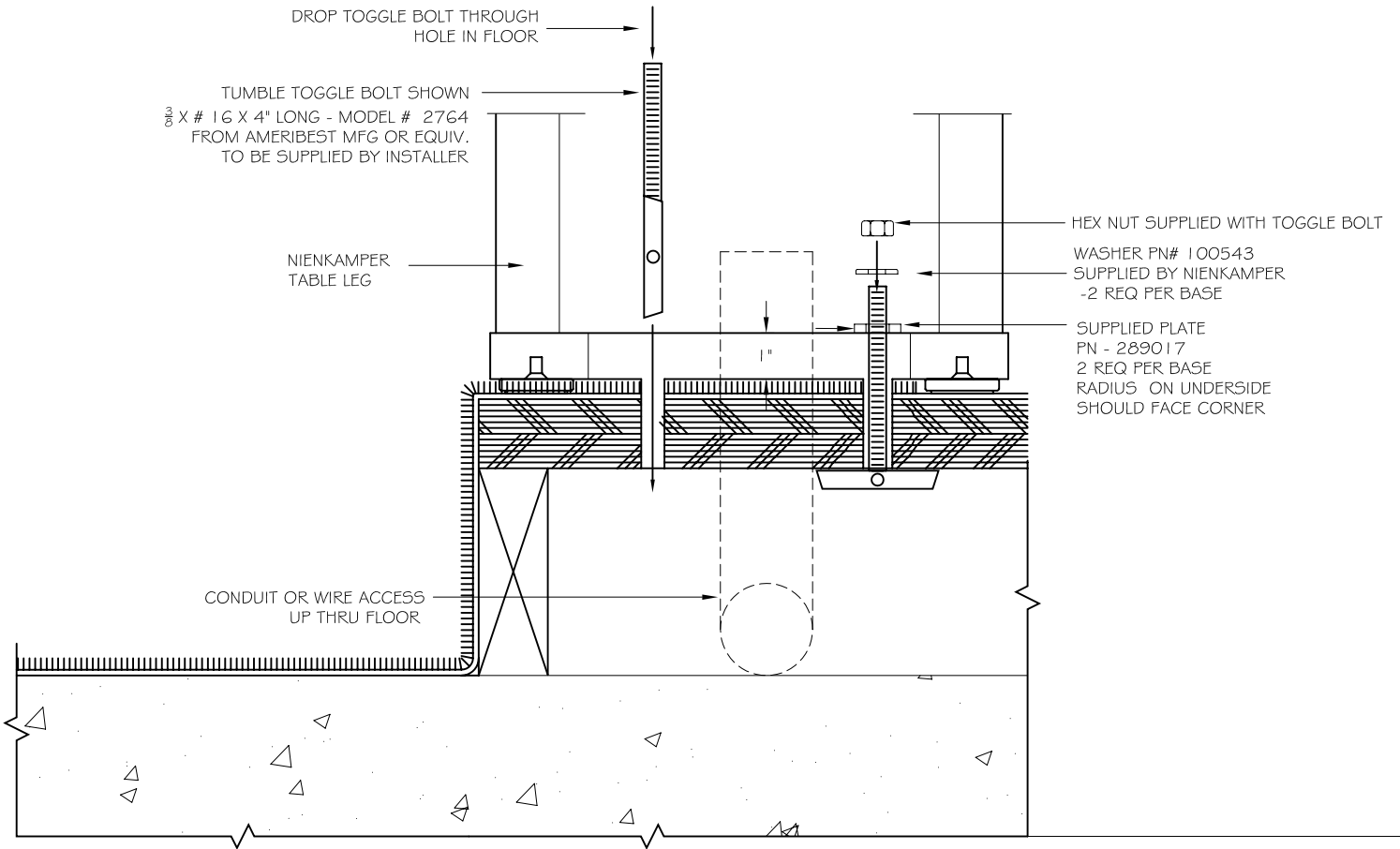


IMAGE # 4 F

VOX LEARNING LEG FULLY BOLTED TO FLOOR

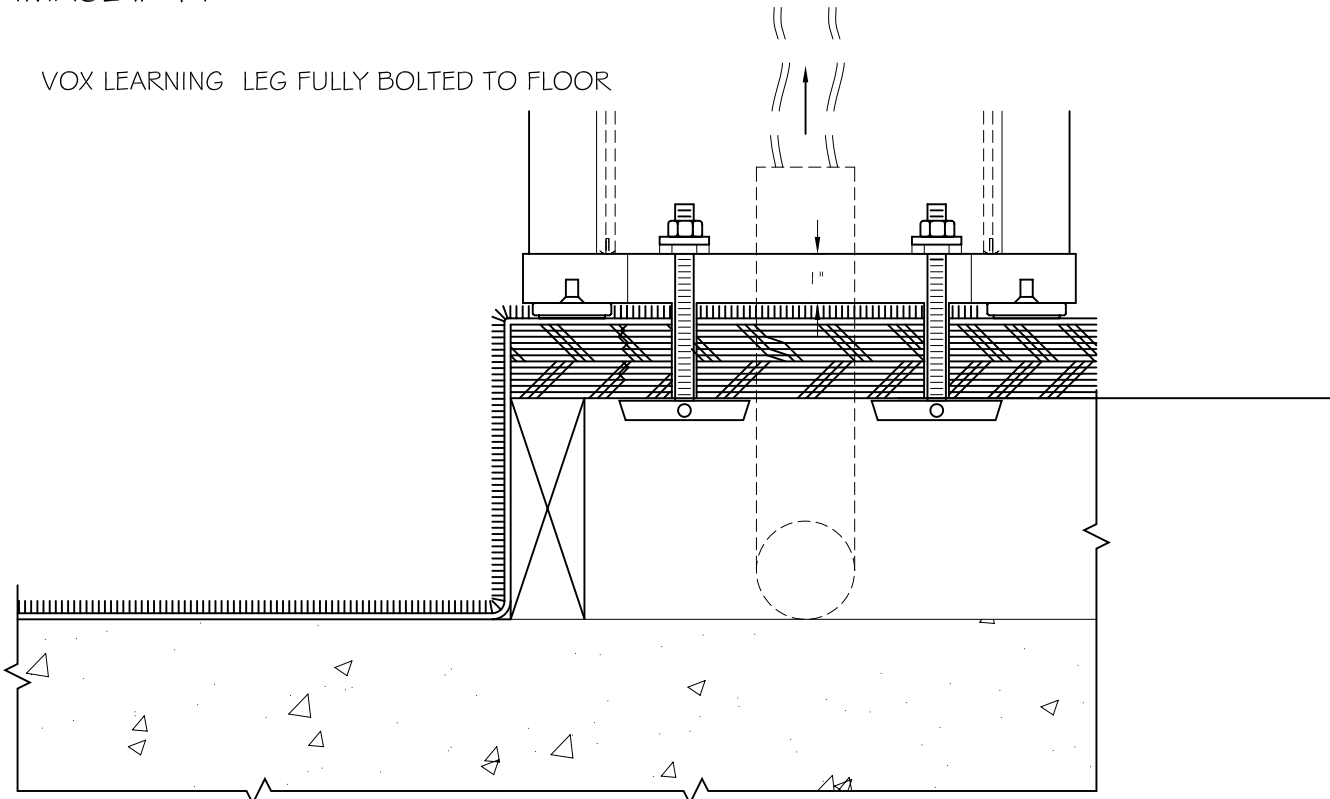


IMAGE # 4 G

VOX " L " SERIES FORUM INSTALLATION

NOTE: L SERIES FORUM INSTALLS FROM THE TOP OF THE WORKSURFACE AND IS SECURED FROM UNDERNEATH WITH FOUR THREADED MACHINE SCREWS. PLEASE REFER TO INSTALLATION INSTRUCTIONS INCLUDED WITH " L " SERIES FORUMS " TO PROPERLY INSTALL FORUM'S TO WORKTOPS.

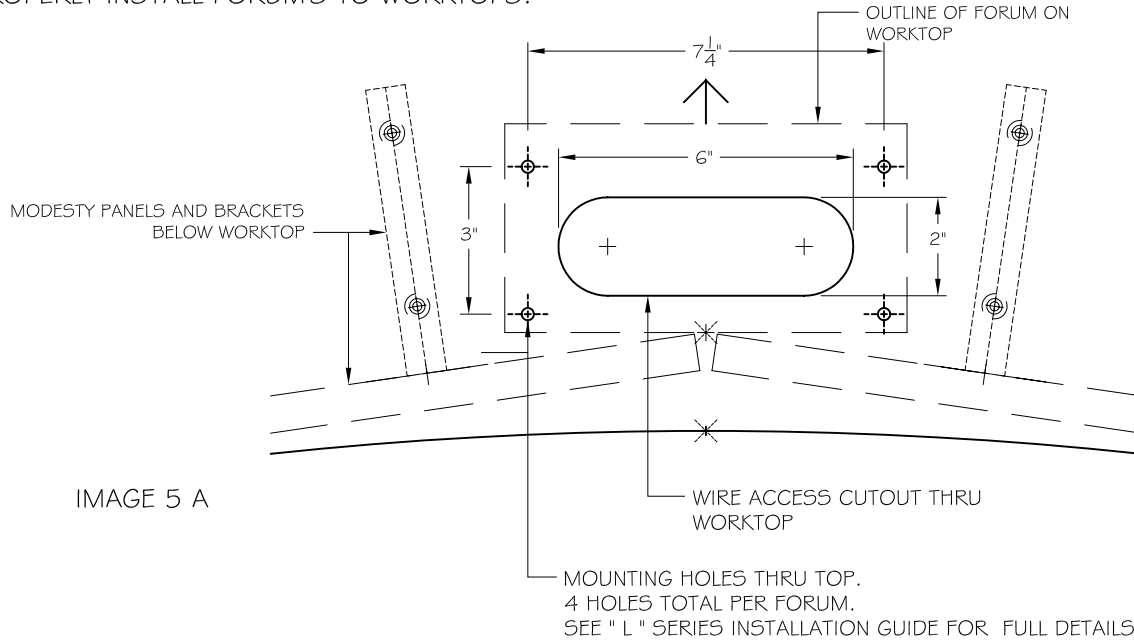


IMAGE 5 A

VOX " S " SERIES FORUM INSTALLATION

NOTE: S SERIES FORUM INSTALLS FROM THE UNDERSIDE OF THE WORKSURFACE AND IS SECURED FROM UNDERNEATH WITH FOUR THREADED MACHINE SCREWS WITH LOCKING TABS. PLEASE REFER TO INSTALLATION INSTRUCTIONS INCLUDED WITH " S " SERIES FORUMS " TO PROPERLY INSTALL FORUM'S TO WORKTOPS.

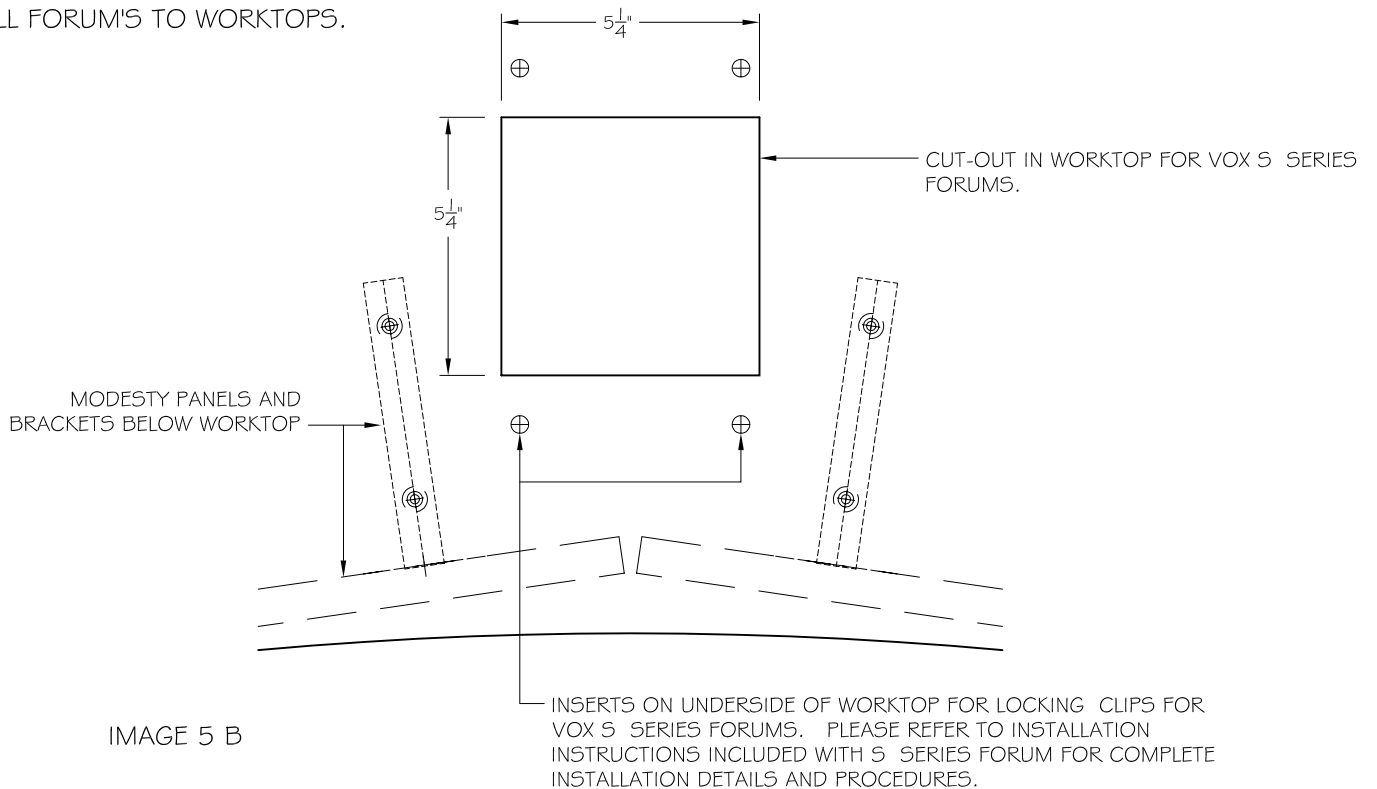


IMAGE 5 B

EACH MODESTY PANEL HAS BEEN MARKED FOR THEIR POSITION IN EACH ROW AND TABLE. SEE IMAGE # 6 F - WHEN PROPERLY INSTALLED, DESIGNATION MARKS ON MODESTY PANELS SHOULD BE FACING UP AGAINST UNDERSIDE OF WORKTOP.

MODESTY PANEL BRACKETS HAVE BEEN PRE DRILLED AT THE FACTORY TO THE UNDERSIDE OF THE WORKTOP. THE MODESTY PANELS THEMSELVES HAVE NOT BEEN PRE-DRILLED.

1) - START BY ATTACHING BRACKETS TO UNDERSIDE OF WORK TOP IN PRE-DRILLED POSITION WITH SCREWS PROVIDED. (IMAGE # 6 A).

2) - POSITION MODESTY PANELS SO THERE IS A $\frac{1}{4}$ " GAP AT CENTRE BETWEEN PANELS. SECURE TO BRACKETS WITH SCREWS PROVIDED. (IMAGE # 6 B). HOWEVER YOU MAY WANT TO DELAY INSTALLING MODESTY PANELS UNTIL ALL WIRING IS COMPLETE TO ALLOW FOR BETTER ACCESS DURING THE WIRING PROCESS.

3) - PANELS AT LEG SHOULD FINISH AS SHOW. GAP AT LEG SHOULD BE SIMILAR TO JOINT IN MIDDLE. (IMAGE # 6 C)

4) PANELS THAT JOIN TO A.D.A. HEIGHT (31.5") HAVE A MITRED TOP EXTENSION THAT MARRIES UP TO THE TRANSITION BLOCK THAT WILL HAVE BEEN PREVIOUSLY INSTALLED. (IMAGE # 6D)

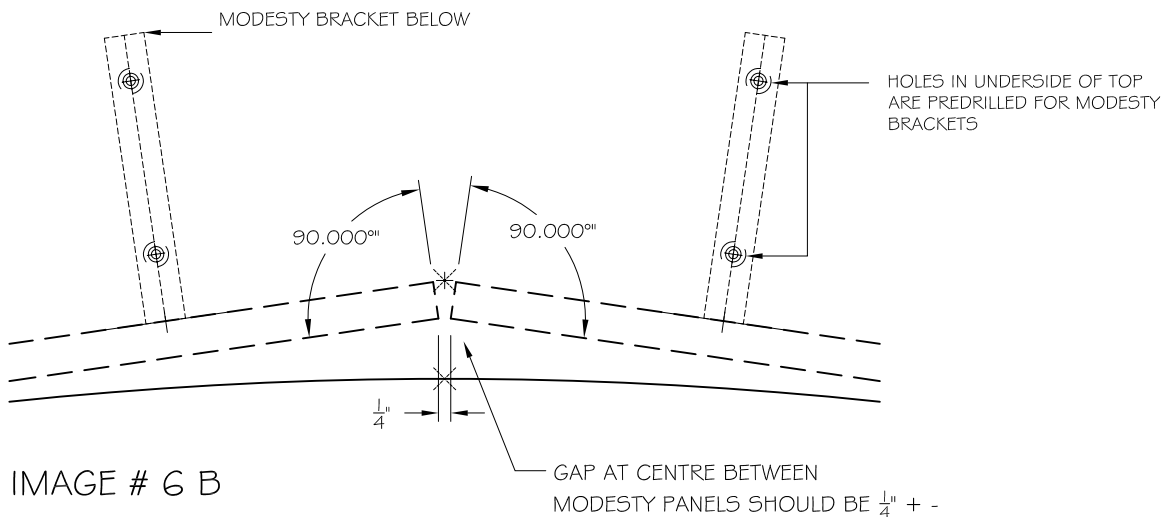
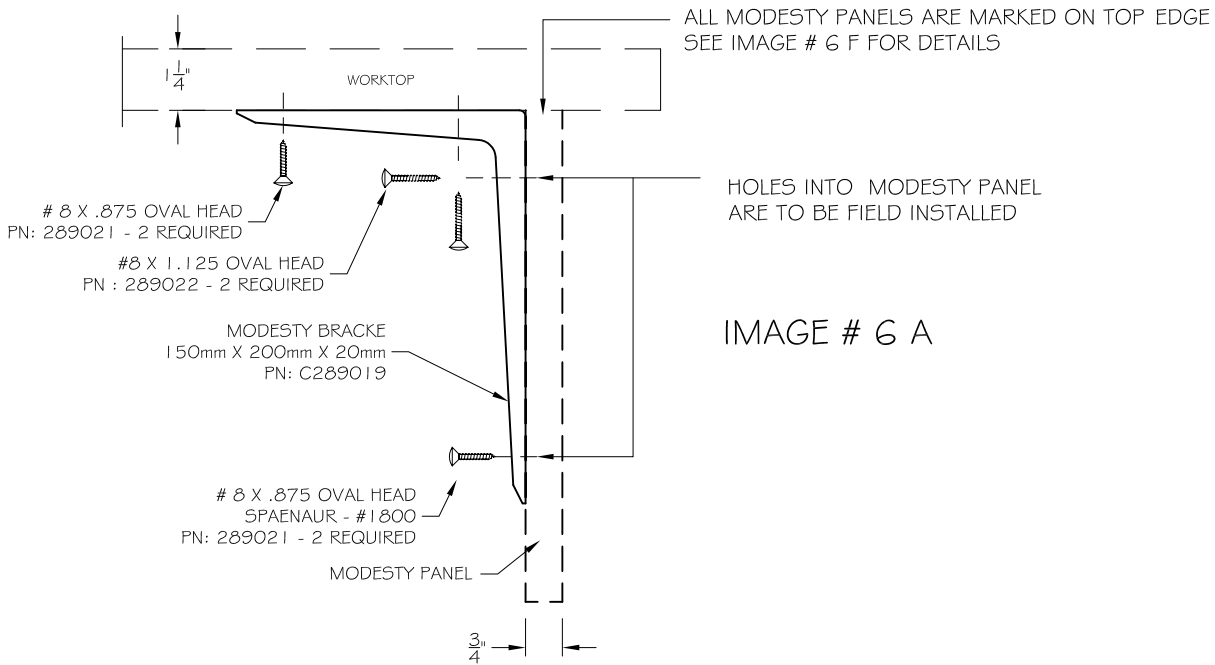


IMAGE # 6 C

MODESTY PANELS AT TYPICAL JOINT

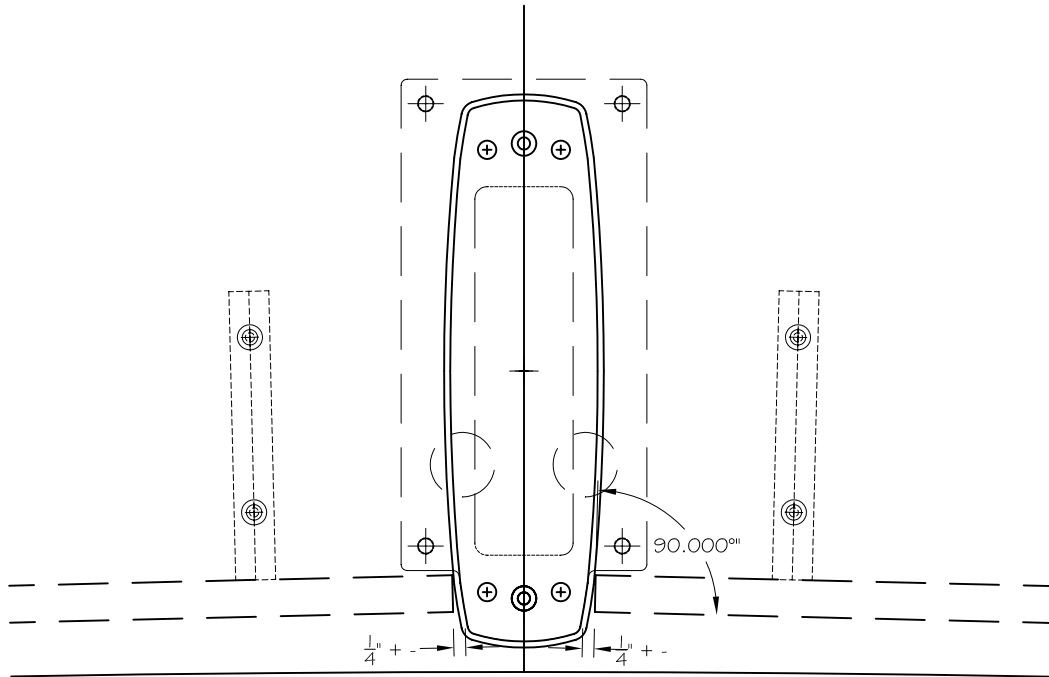
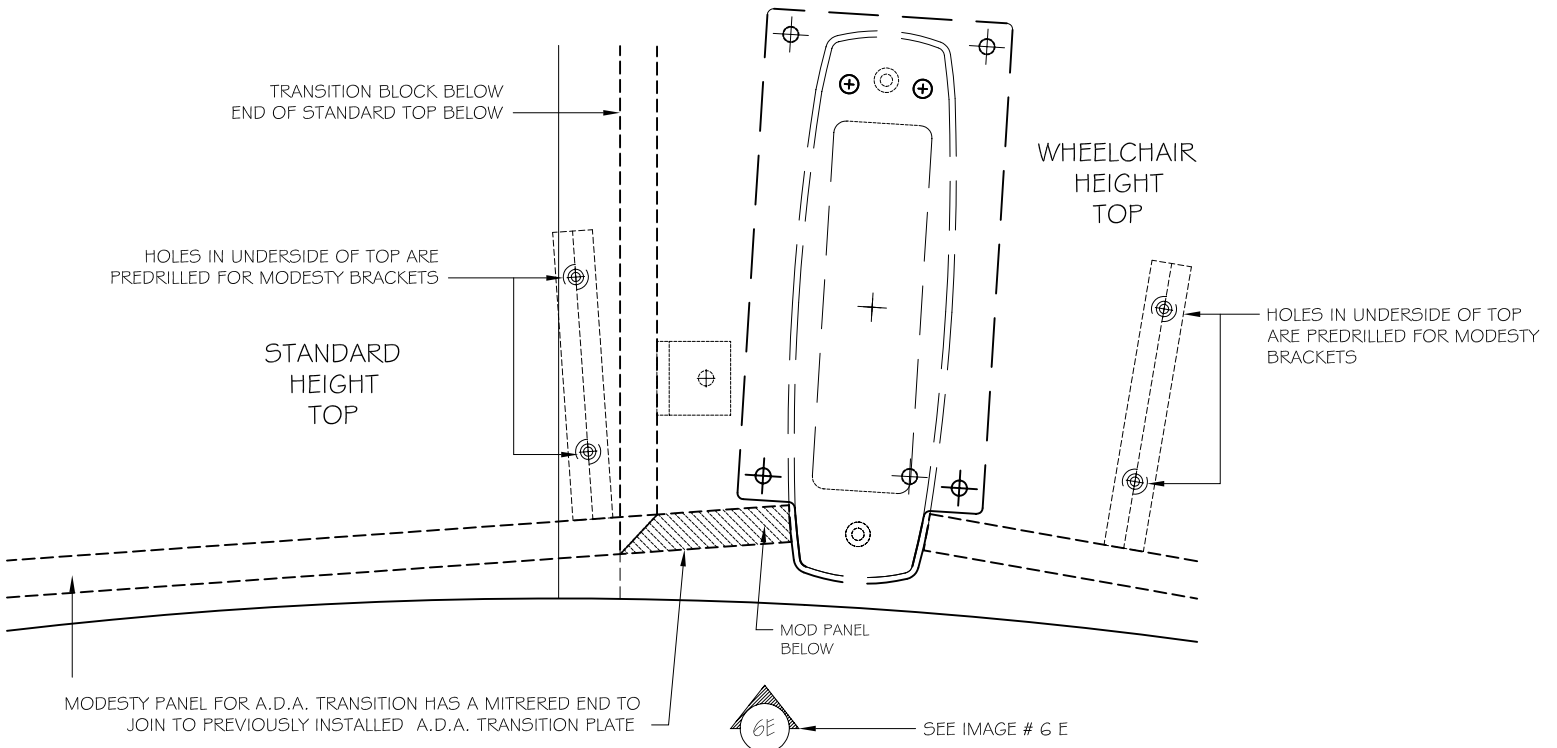
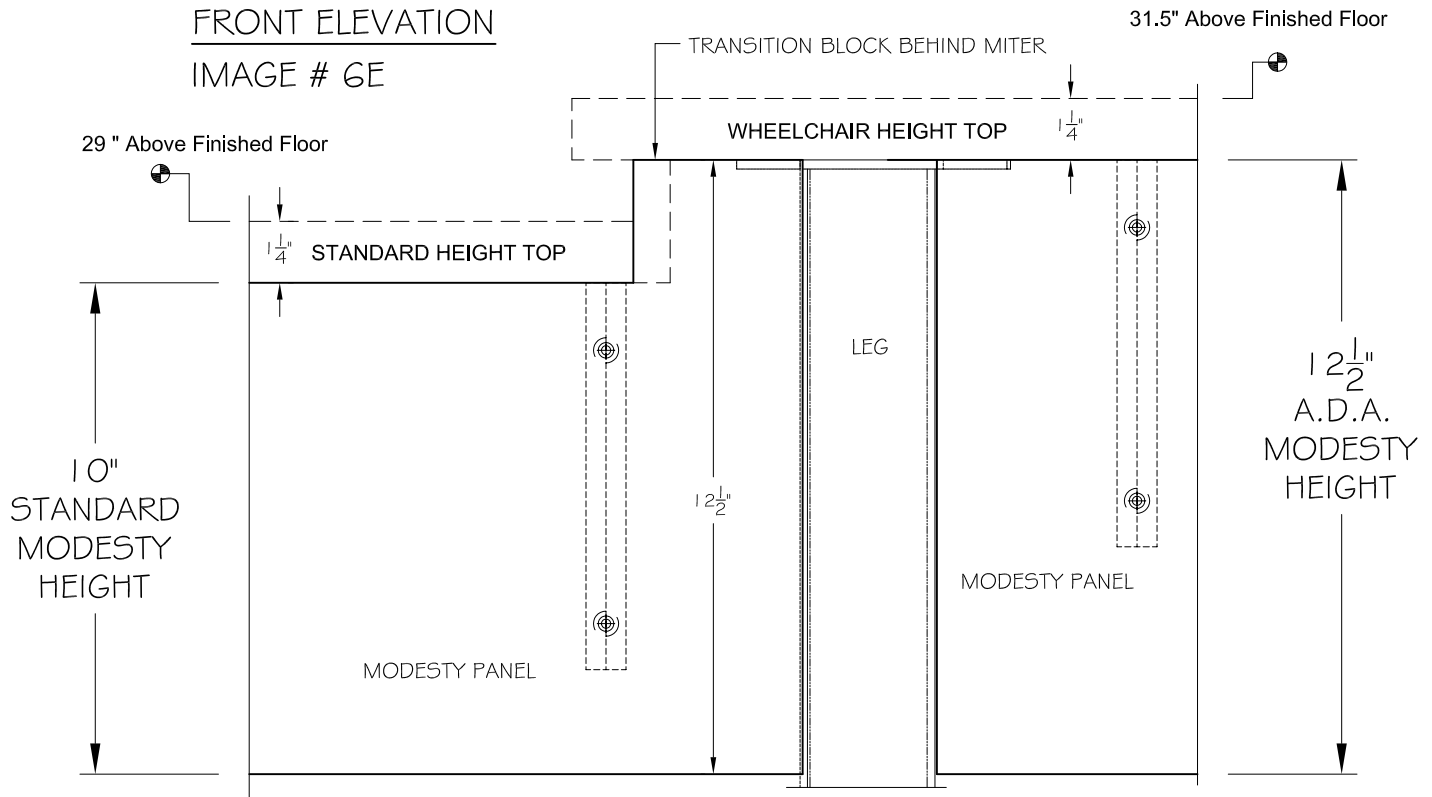


IMAGE # 6 D

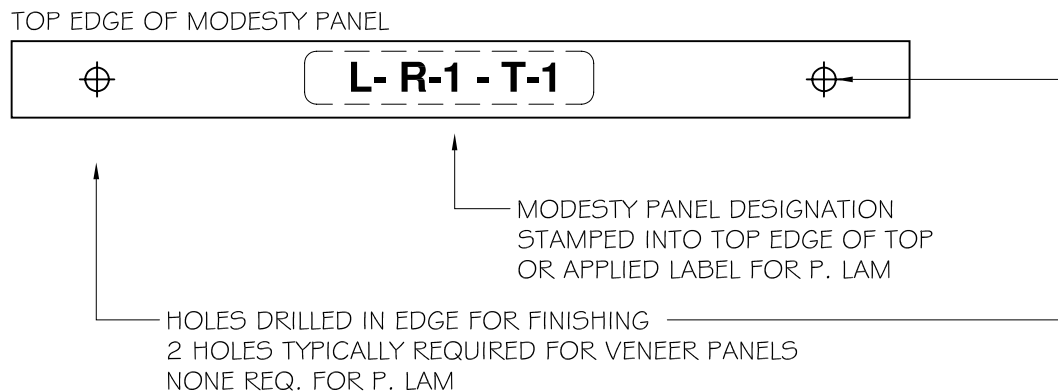
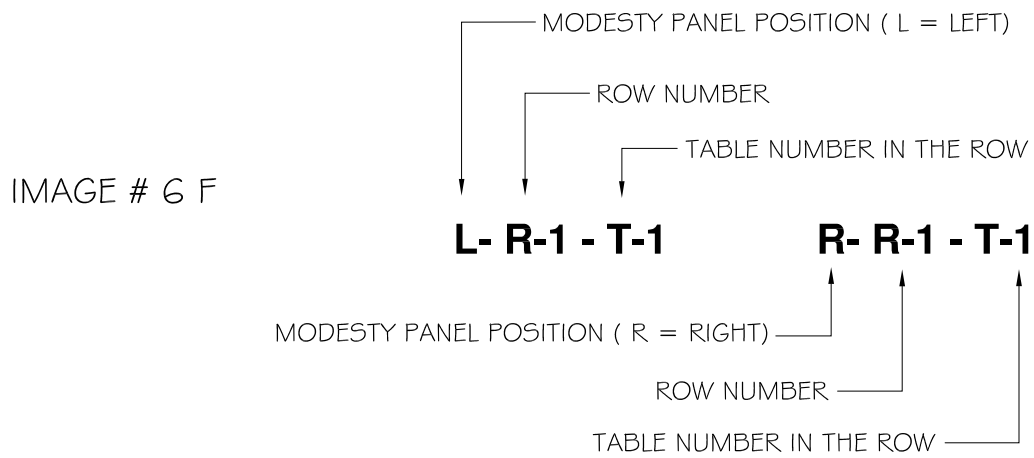
A.D.A. TRANSITION & MODESTY PANELS

PLAN VIEW





SEE IMAGE 3 A FOR A PLAN VIEW OF THIS CONECTION



VOX LEARNING SERIES SHROUD & NAME CARD

VOX LEARNING SHROUD IS FIXED TO TOPS AND MUST BE ORDERED EITHER AS FACING OUT OR FACING IN. IT CAN NOT BE REVERSED AFTER INSTALLATION

USES STANDARD "AVERY" LABELING PRODUCTS THAT CAN BE LASER PRINTED AS REQUIRED.

TYPICAL ELEVATIONS

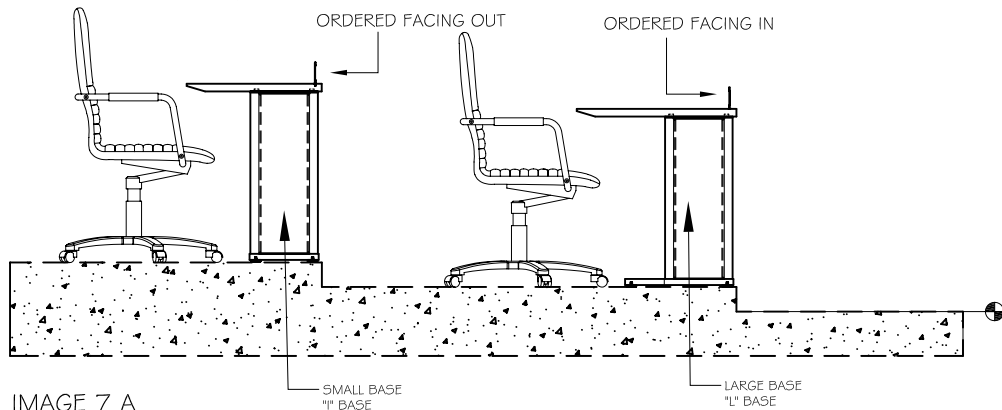


IMAGE 7 A

DETERMINE DIRECTION SHROUD IS FACING
NOTE: THAT PENCIL STOP IS NON HANDED AND PROFILE IS SAME ON BOTH SURFACES.

NOTCH ON END AT UNDERSIDE INDICATES A END OF ROW OR END OF RUN CONDITION. PIECES WITH SQUARE END IS USED ON TOPS IN THE MIDDLE OF A ROW

OUTWARD FACING SHROUD

INWARD FACING SHROUD

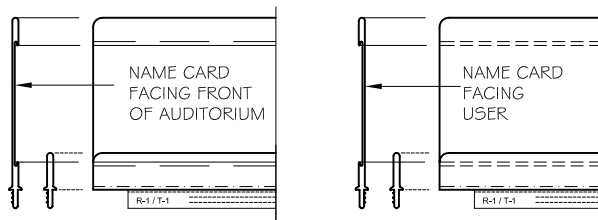
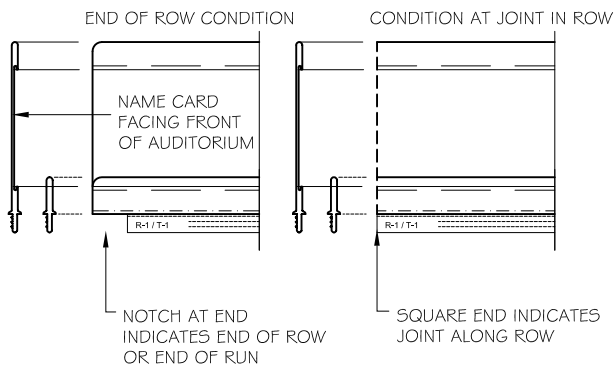
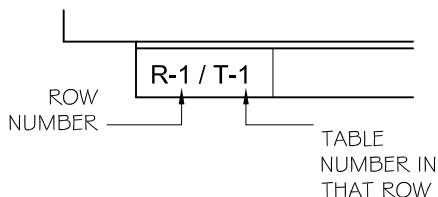


IMAGE 7 B

IMAGE 7 C



EACH SECTION OF PENCIL STOP AND SHROUD IS MARKED FOR IT'S OWN POSITION IN EACH ROW. PIECES WITH A NOTCH ON THE LOWER END ARE FOR END OF RUN / END OF ROW.(SEE IMAGE 7 B) CHECK TO SEE THAT PIECE IS FOR THE CORRECT TOP. IF PIECE CHOSEN STOPS AT A MATCHING JOINT IN THE TABLE, BEGIN YOUR INSTALLATION THERE AT THE JOINT. STARTING AT ONE END, AND USING A NON MARKING OR RUBBER Mallet, TAP SHROUD / PENCIL~STOP INTO GROOVE. WORK YOUR WAY DOWN THE LENGTH UNTIL IT IS FIRMLY SEATED TO WORKSURFACE. REPEAT FOR ALL TABLES IN THE ROW

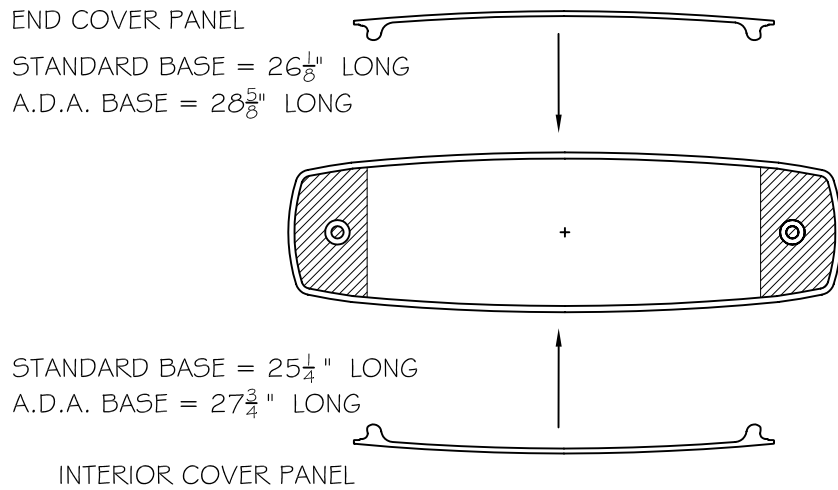


EACH BASE SECTION HOUSES A RUBBER GASKET RUNNING VERTICALLY THAT COVER PANELS USE TO LOCK INTO. USE EITHER A RUBBER Mallet OR RATCHET CLAMP WITH RUBBER PADS AND PRESS PANEL INTO BASE. PANELS SHOULD BE TOUCHING BASE PLATES.

COVER PANELS FOR BASES ALONG, OR ON INTERIOR OF ROW ARE REDUCED IN HEIGHT FOR WIRE ACCESS AND PASSAGE. SEE BELOW FOR STANDARD EXTERIOR AND INTERIOR COVER PANEL SIZES. END OF ROW BASES WILL HAVE 1 EACH OF END AND INTERIOR PANELS. BASES ALONG LENGTH OF ROW WILL HAVE TWO INTERIOR HEIGHT PANELS

IMAGE 8 A

PLAN VIEW
COLUMN BASE



PLAN VIEW
CANTILEVER BASE

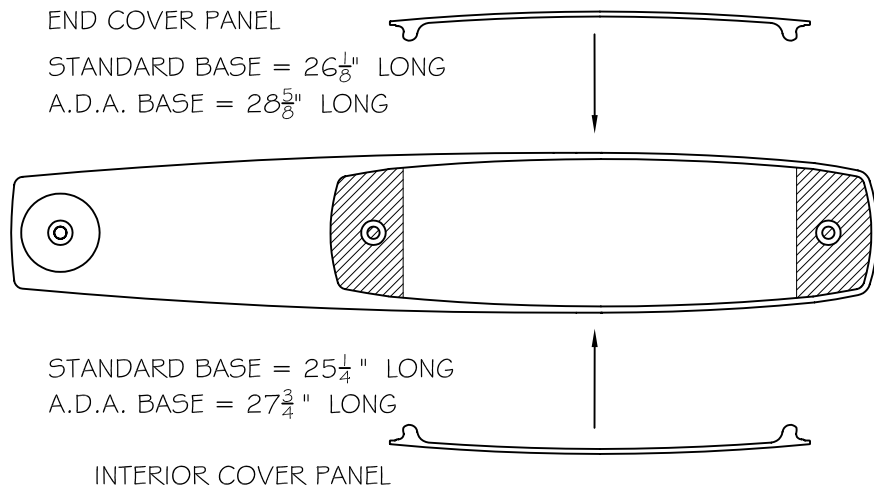
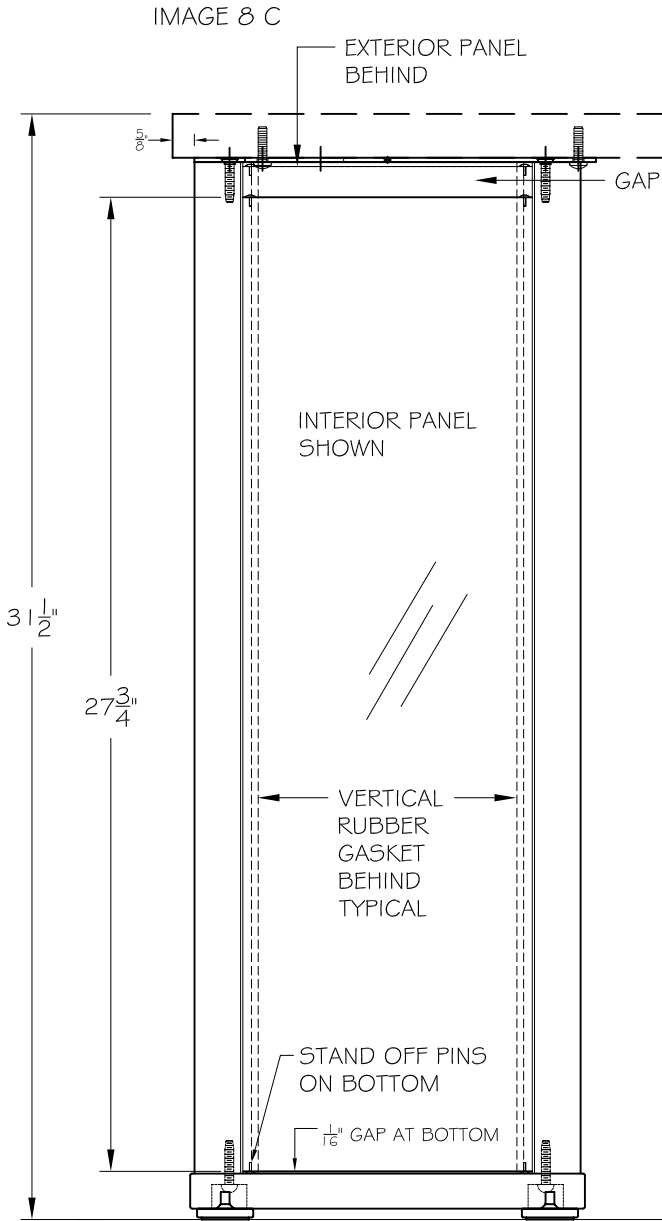
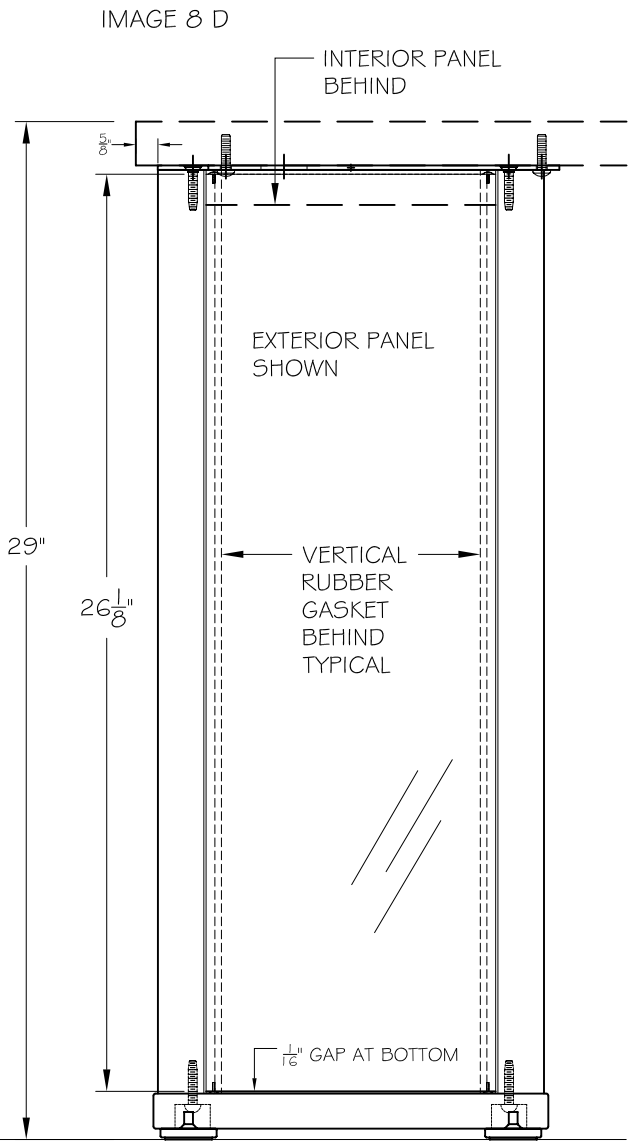


IMAGE 8 B

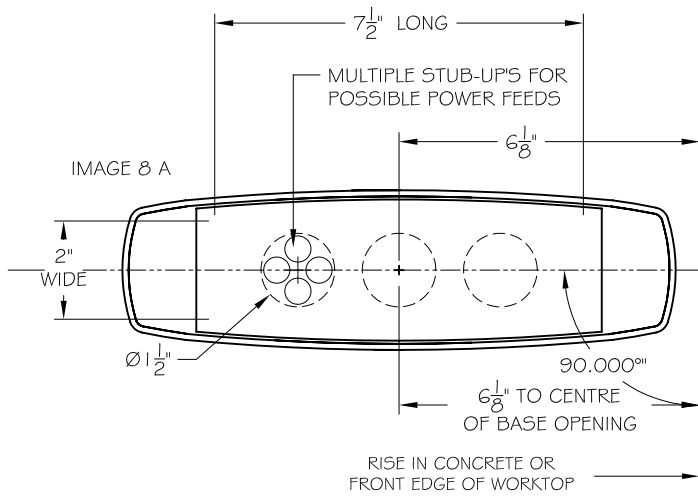
INSTALLING BASE COVER PANELS



A.D.A. HEIGHT BASE ELEVATION



STANDARD HEIGHT BASE ELEVATION



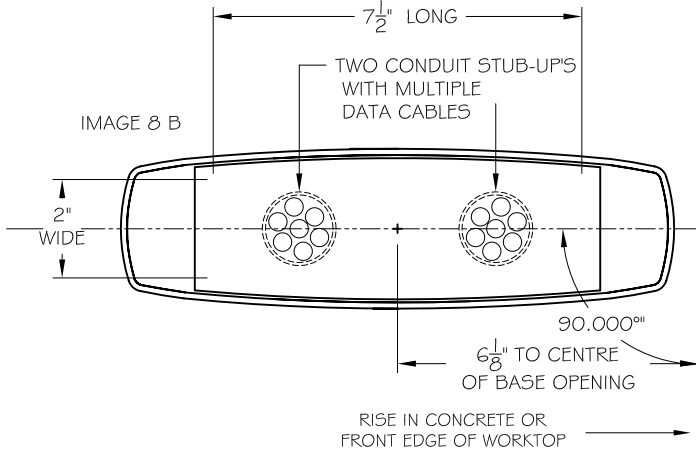
WHEN DETERMINING CORE DRILLING OR CONDUIT PLACEMENT IN THE FLOOR PLEASE NOTE THE FOLLOWING SPECIFICATIONS.

VOX LEARNING BASES ARE LOCATED 6 1/8" TO CENTRE, FROM EITHER THE RISER OR FRONT EDGE OF THE TOP.

BASES HAVE A OPENING IN THE BOTTOM THAT IS 2 " WIDE BY 7 1/2" LONG FOR WIRE ACCESS.

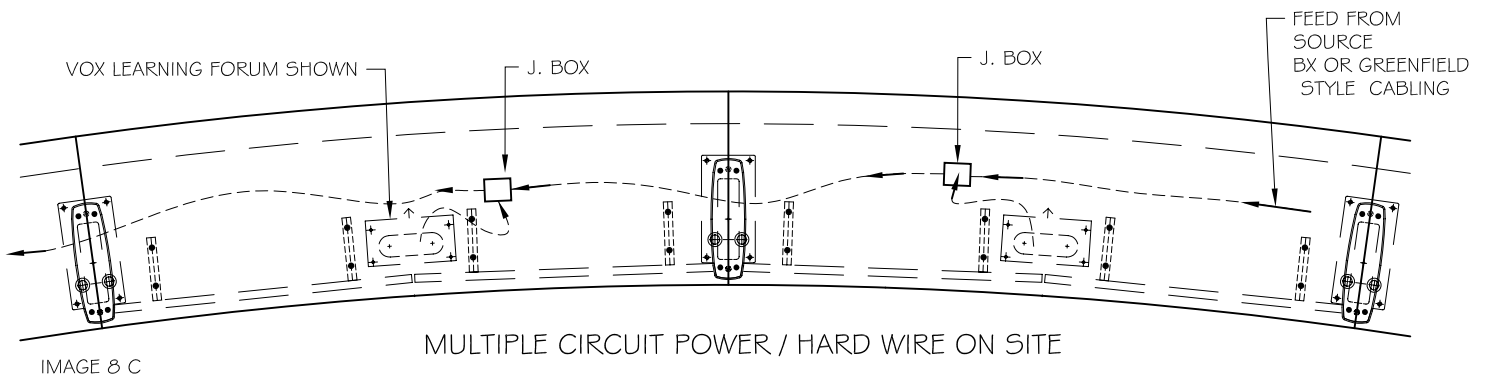
ALL BASES ARE PERPENDICULAR (90 °) TO THE FRONT WORK TOP EDGE. FOR ROWS WITH RADIUS SHAPES, ALL BASES ARE RADIAL LINES (PERPENDICULAR) TO THE RADIUS OF THE WORKTOP.

CORE DRILLS OR WIRE CONDUITS SHOULD ALIGN THEMSELVES TO THIS OPENING.



WHEN DETERMINING CORE DRILLING OR CONDUIT PLACEMENT FOR DATA WIRING PLEASE NOTE THE FOLLOWING. GENERALLY IT IS BEST TO BRING DATA AND VOICE CONNECTIONS UP ONE LEG AND POWER FEEDS UP A DIFFERENT LEG IN THE ROW.

DATA CONNECTIONS CAN BE DISTRIBUTED EITHER INDIVIDUALLY OR BY MEANS OF A HUB ATTACHED TO THE UNDERSIDE OF THE WORK SURFACE AND THEN DISTRIBUTED. QUANTITIES OF CONECTIONS AND DEPTH OF WORK TOP WILL DETERMINE WHICH STRATEGY YOU CHOOSE.



VOX FORUMS FOR SITE WIRED APPLICATION CAN BE DAISY CHAINED ON SITE BY LOCAL ELECTRICAL CONTRACTORS. THE USE OF A LOW RISE JUNCTION BOX PLACED UNDER THE TABLE IS REQUIRED THAT ALLOWS THE CONTRACTOR TO GANG TOGETHER MULTIPLE FORUMS, WIRING IS SUBJECT AND RELATIVE TO LOCAL CODE INTERPRETATION, AND RESTRICTIONS.

