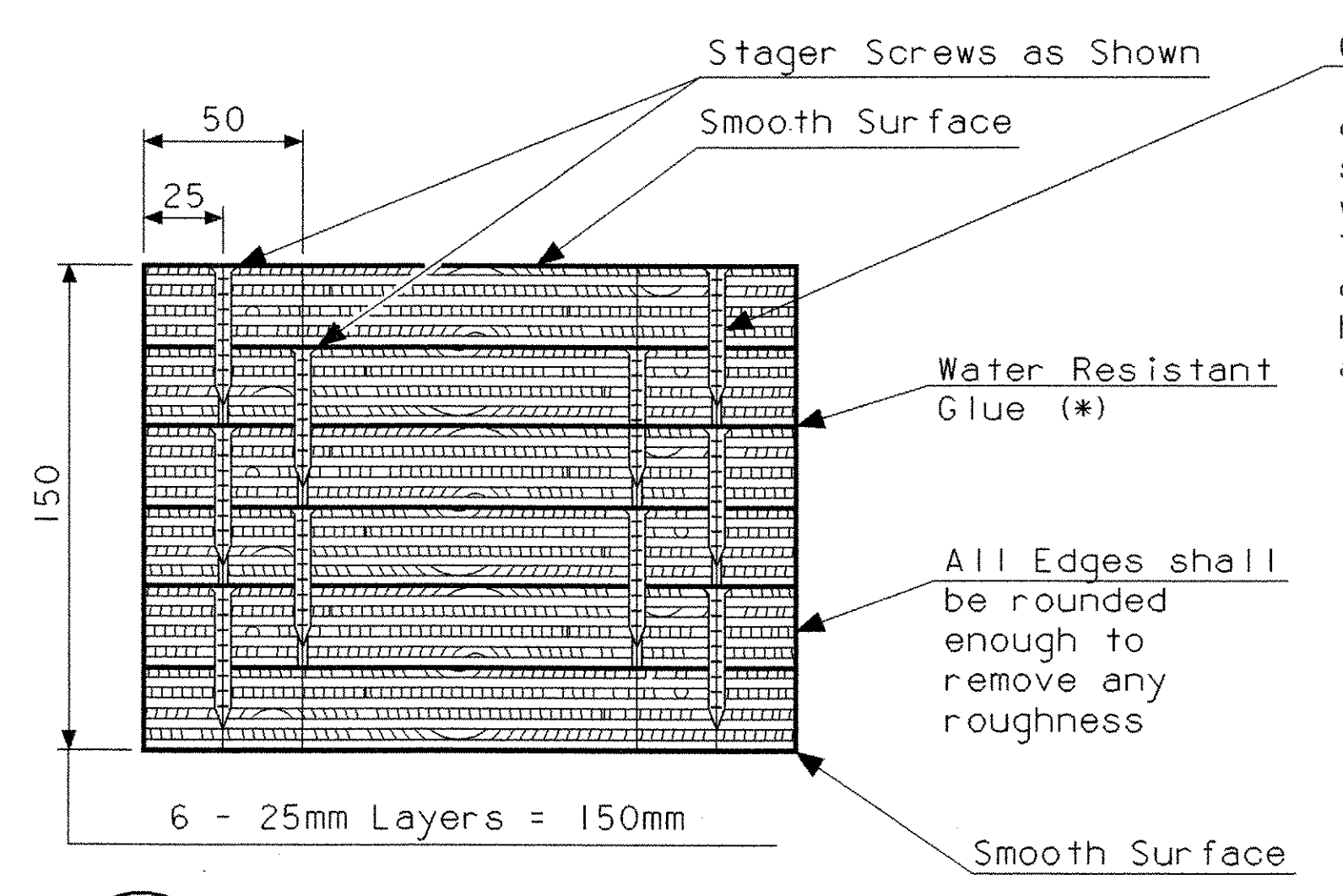


16 **TOP VIEW**
SCALE 1:2



16a **SIDE VIEW**
Side view of AC Plywood Layering SCALE 1:2

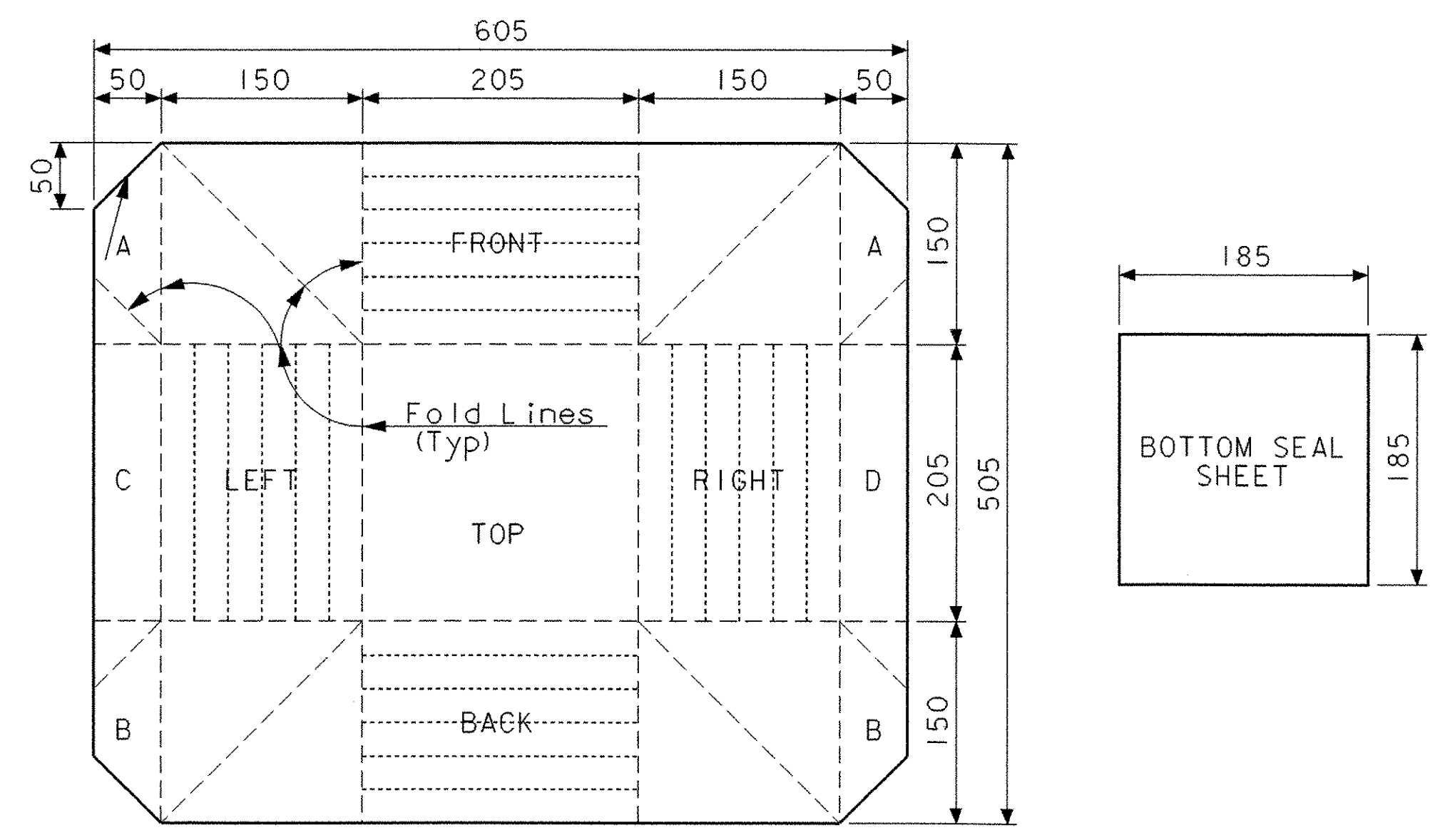
6 layers of 205 x 205 x 24.6 Plywood (*). Each layer bonded to the next with a water resistant glue (*) and fastened with 121mm galvanized wood screws (*). The screw holes shall be predrilled with a 3mm drill. The top layer shall only have the 4 outer holes drilled. The bottom layer shall have the 4 outer holes drilled to 12mm. All other layers shall have all holes drilled as shown.

NOTES:

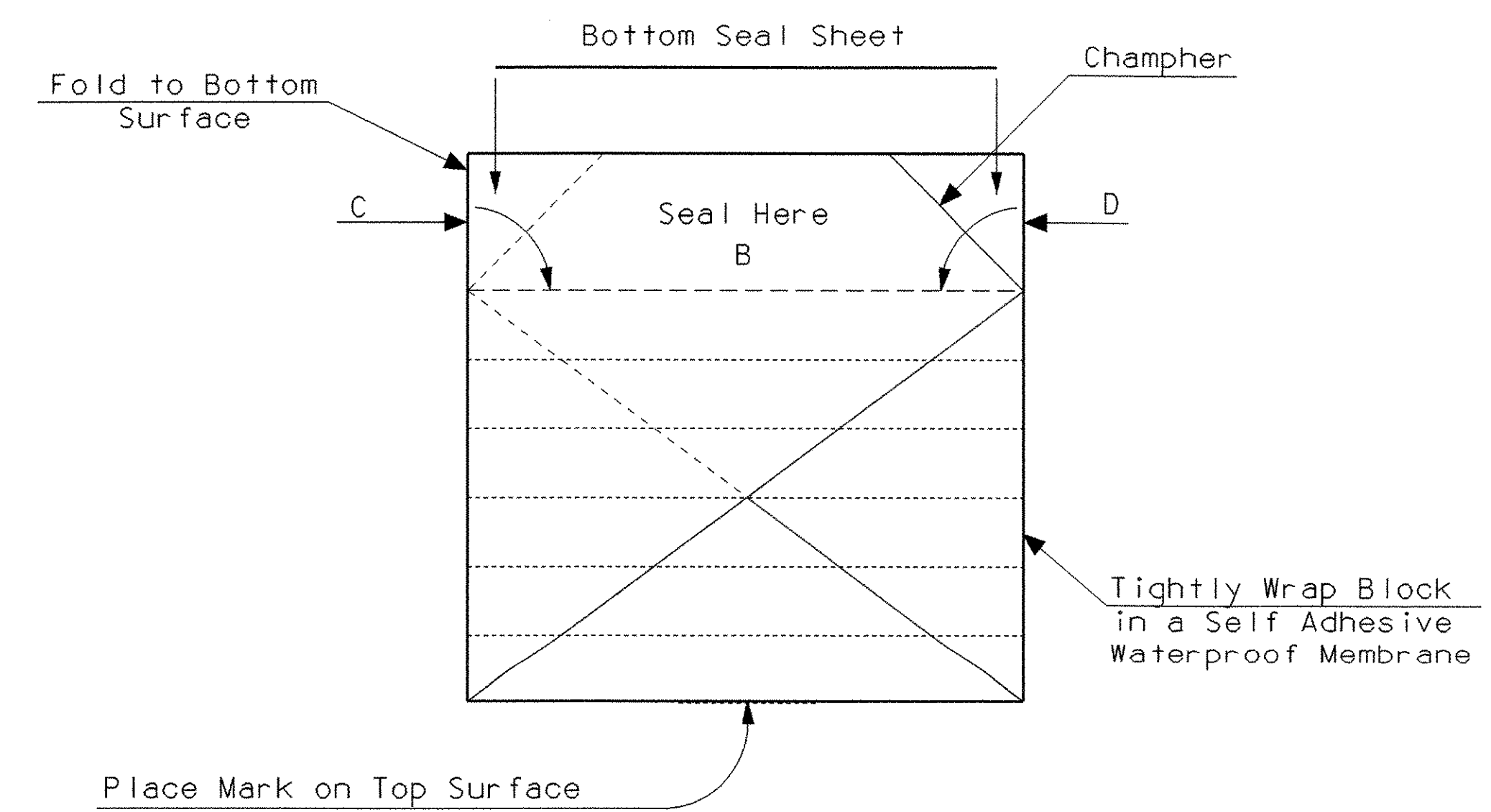
- The Plywood must be received dry and moisture free, and must be stored in a dry place prior to fabrication. The Contractor may use a laminated engineered timber product that meets or exceeds the requirements specified on this sheet and can be trimmed to the dimensions shown on this sheet. In this case, the laminations of the product must be parallel to the bearing surface in the same manner as the plywood is detailed on this sheet.
- There will be a +/- 1mm Tolerance on any measurement shown on this sheet for plywood and + 5mm for waterproof membrane.
- The bearing shall be constructed with the grade A side of the Plywood facing outward for the top and bottom layers.
- The blocks shall be sanded smooth prior to placing them into the linseed oil. All edges shall be rounded slightly.
- Once the 205x205x150 blocks are bonded and fastened, the blocks shall be placed in a vat of linseed oil for one week to ensure the oil has been fully absorbed into the wood. The blocks shall be rotated and flipped in the vat daily to ensure full coverage.
- After the blocks are removed from the linseed oil, they shall be hand dried with an absorbing cloth to remove any excess oil.
- The blocks shall be allowed to air dry in a moisture free place for 24 hours.
- Each block shall be inspected for any remaining oil. Once all excess oil is removed, they shall be tightly wrapped in a self adhesive waterproof membrane as shown on this sheet. The fabricator shall ensure that the waterproof membrane is not torn after application. Holes may be patched with additional waterproof membrane. Such patches shall be rectangular in size and large enough to cover an area that measures a minimum of 25mm outside the perimeter of the hole. The fabricator shall ensure that the entire membrane sheet is in contact with the block and that there are no air bubbles/blisters. Blisters 5 mm or less may be neglected. Blisters may be punctured using a razor blade to puncture the bubble. The puncture hole shall be repaired using a 50 mm square piece of membrane.
- A mark shall be placed on the top of the block, as shown.
- The bearing blocks shall be kept free of moisture during shipping and while in storage.

(*) MATERIALS SPECIFICATIONS

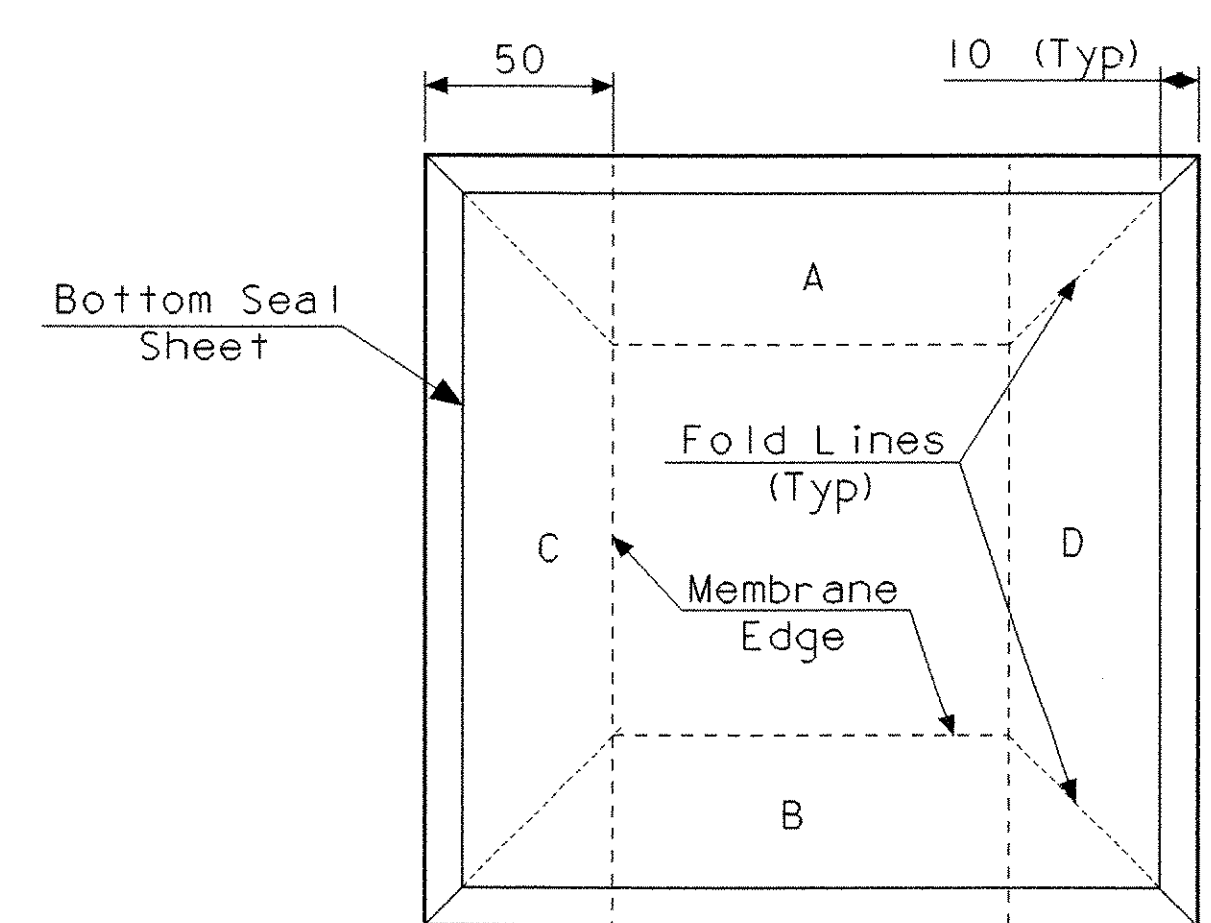
- PLYWOOD:**
Shall be a high grade AC Plywood as specified by ANSI/AITC A 190.1 or a marine grade plywood as specified in the A.P.A Plywood Design Specifications.
- WOOD SCREWS:**
Shall be galvanized wood screws as specified by ANSI/ASME 18.6.1.
- GLUE:**
Shall be a water resistant glue or epoxy which conforms to ASTM D2559.
- MEMBRANE:**
Shall be a self adhesive waterproof membrane which conforms to the following specifications:
 - Thickness: ASTM D3767, Method A
 - Tensile strength: ASTM D412 (Die C modified)
 - Elongation: ASTM D412 (Die C MOD)
 - Low temperature flexibility: ASTM D1970
 - Adhesion to plywood: ASTM D903
 - Permeance (max): ASTM E96
 - Material weight installed (max): ASTM D461



16b **TEMPLATE OF SELF ADHESIVE WATERPROOF MEMBRANE**
SCALE 1:4



16c **BACK VIEW OF SELF ADHESIVE WATERPROOF MEMBRANE WRAP**
SCALE 1:2



16d **BOTTOM VIEW OF SELF ADHESIVE WATERPROOF MEMBRANE WRAP**
SCALE 1:2

MATERIALS REQUIRED: (ENGLISH UNITS)

For a total of 26 wood block bearings:	
3	Sheets of 4ft x 8ft x 3/8 inch AC Exterior Plywood #
3	Pounds of 1 3/4" Galvanized Wood Screws (9 gauge)
1	8200 long by 1220 wide sheet of Waterproof ##
	Membrane from roll.
	Linseed Oil
All materials and labor used to construct the required number of bearing devices shall be made part of item 531.10, "Bearing Device Assembly (Timber)"	

Use a [US] 4 ft x 8 ft x 3/8 inch measure for plywood
About a [US] 27 ft length from a 4 ft roll.

Bearing Device (Timber)

PROJECT NAME:	Charleston	PLOT DATE:	13-APR-2006
PROJECT NUMBER:	BRO 1449 (22)	DRAWN BY:	G. Colgrove
FILE NAME:	.../Structures/bearing.dgn	CHECKED BY:	
PROJECT LEADER:	M. Evans-Mongeon	SHEET	33 OF 50
DESIGNED BY:	G. Colgrove		
IPARM:	sj051ber.i		