

20 Foot Dome Deck, Joist Method, One PHD-A (Metric and Imperial with Imperial Lumber)

1. Lay out the pier blocks according to Sheet 1 of drawing SD-20-24. Dig each pier block into the ground an inch or two and make each one level with itself.
2. Cut and lay out the beams according to Sheet 1. Leave the ends of the beams long (extending past the perimeter of the floor). Cut them later.
3. Level the beams with various lengths of 4 x 4 atop piers.
4. Cut the 8 "C", 5 "D", 2 "E", 1 "F", 1 "G" and 1 "U" boards from the nine 2x6x10 ft. boards.
Cut the 1 "H" and 1 "T" boards from the two 2x6x12 ft. boards.
Cut the 1 "I" and 1 "S" boards from the two 2x6x16 ft. boards.
Cut the 1 "J", 1 "K", 1 "L", 1 "M", 1 "N", 1 "O", 1 "P", 1 "Q" and 1 "R" boards from the nine 2x6x20 ft. boards.

Note: All board length dimensions refer to the long side of the board,

5. Frame according to Sheet 2 of drawing SD-20-24. The center of joist "N" is located 1 5/16" from the center of the dome, toward the back of the dome. All other joists will be 16" on center from joist "N" with the exception of joists "G" and "U". "G" and "U" will butt up to the inside of "D" at the back of the dome and "F" at the door.
6. Cover with plywood according to Sheet 3 of drawing SD-20-74.
7. Rasp, sand and finish with exterior grade varnish.

20-A PHD-38X81.75-4X6-(JOIST)
Board Cut and Material List

Board Cut List

Letter	Qty.	Size (Nominal)	Size (Actual)	Length ¹	Ends ²
A	2	4x6 - 100x150	3 1/2"x 5 1/2" - 89mm x 140mm	240" - 6096mm	0°
B	2	4x6 - 100x150	3 1/2"x 5 1/2" - 89mm x 140mm	144" - 3658mm	0°
C	8	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	49 11/16" - 1262mm	12° - 12°
D	5	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	48 5/8" - 1236mm	12° - 12°
E	2	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	26 5/8" - 676mm	13° - 5°
F	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	45" - 1143mm	5° - 5°
G	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	54 5/8" - 1387mm	66° - 66°
H	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	128 7/16" - 3262mm	66° - 66°
I	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	162 7/8" - 4137mm	42° - 42°
J	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	192 1/8" - 4879mm	42° - 42°
K	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	209 7/8" - 5331mm	18° - 18°
L	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	220 1/4" - 5595mm	18° - 18°
M	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	230 11/16" - 5859mm	18° - 18°
N	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	230 13/16" - 5863mm	6° - 6°
O	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	227 1/4" - 5772mm	6° - 6°
P	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	223 3/4" - 5681mm	6° - 6°
Q	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	211 1/16" - 5362mm	30° - 30°
R	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	192 15/16" - 4900mm	30° - 30°
S*	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	174 3/4" - 4438mm	30°/54° - 30°/54°
T	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	132 1/16" - 3354mm	54° - 54°
U	1	2x6 - 50x150	1 1/2" x 5 1/2" - 38mm x 140mm	60 7/8" - 1497mm	79° - 79°
-	16	4x4 - 100x100	3 1/2" x 3 1/2" - 89mm x 89mm	As required	0°
-	12	3/4"		4' x 8'	As required

Material List

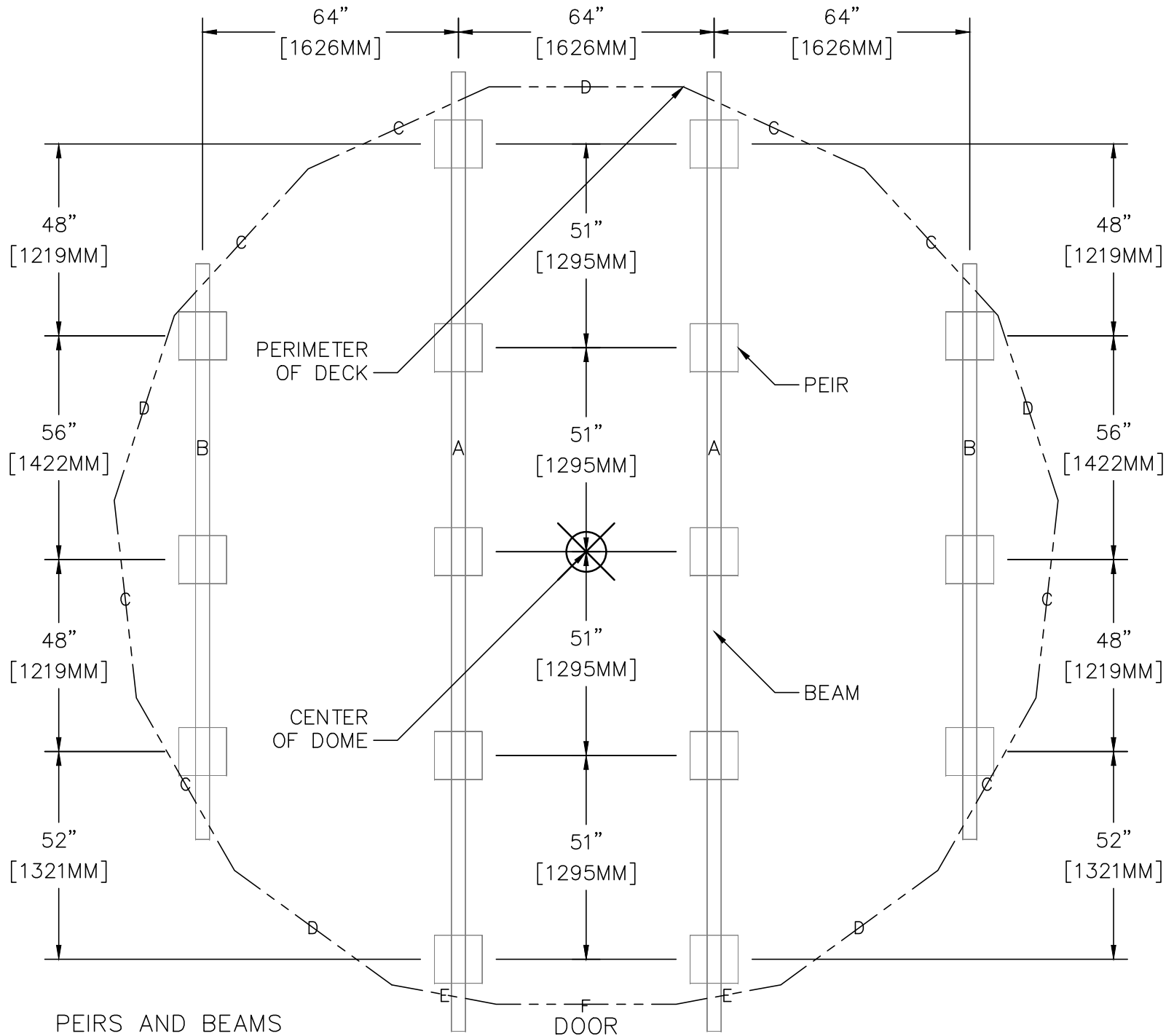
Qty.	Item	Material Allocation
16	Pier blocks	Piers
As required	4" x 4"	Posts
2	4" x 6" x 20'	A
2	4" x 6" x 12'	B
9	2" x 6" x 20'	J,K,L,M,N,O,P,Q,R
2	2" x 6" x 16'	I,S
2	2" x 6" x 12'	H,T
9	2" x 6" x 10'	C,D,E,F,G,U
10	lbs. of 16d galvanized box nails ³	Fasteners
12	Sheets of 3/4" plywood	Cladding
10	lbs. of 8d galvanized box nails ³	Fasteners
2	Gallons exterior varnish	Finish

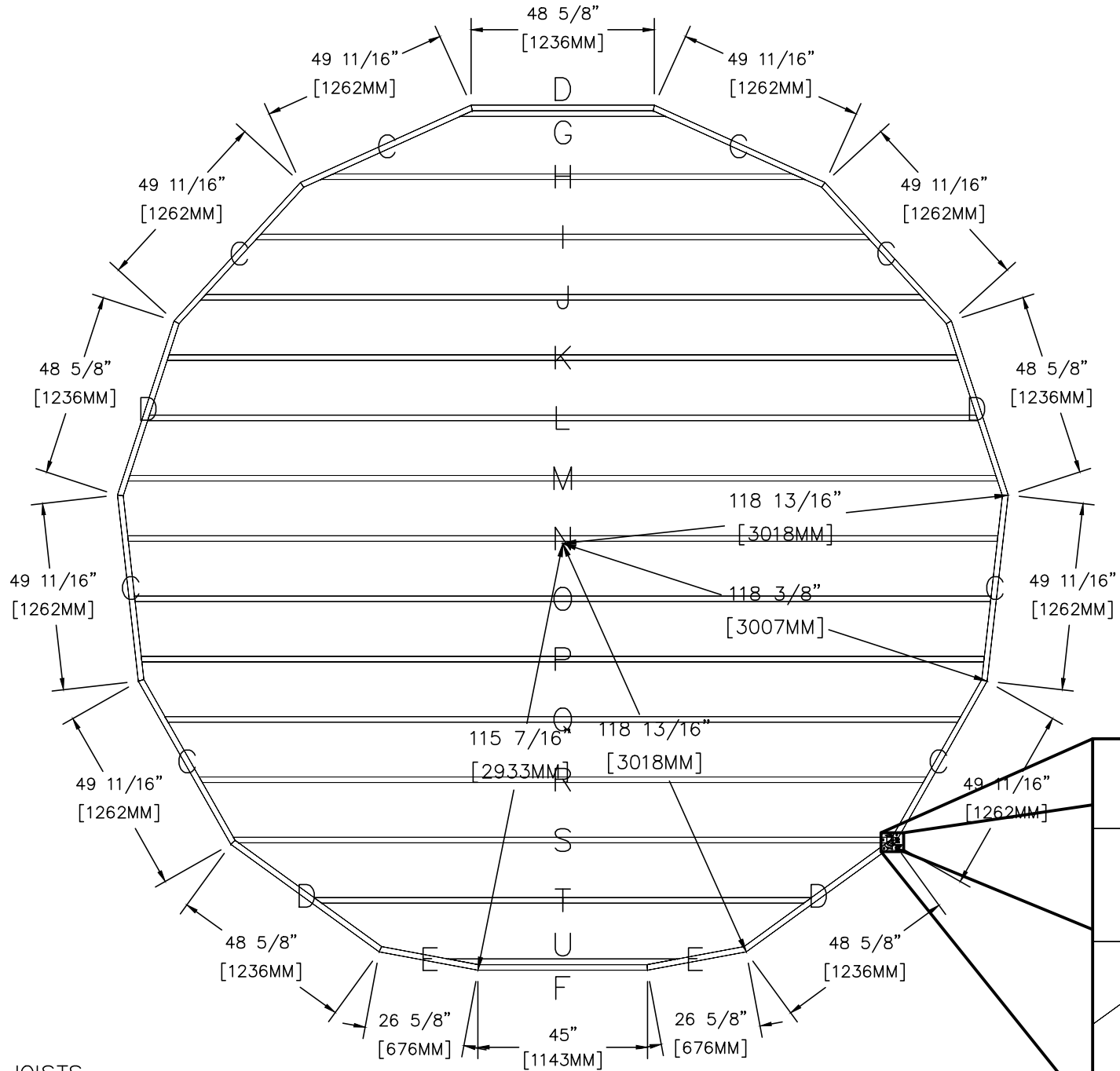
¹ All lengths in inches and millimeters and for the long side of the board.

² Angles shown are the angles of the material cut off. For angles less than 45°, this is the angle of the saw setting.

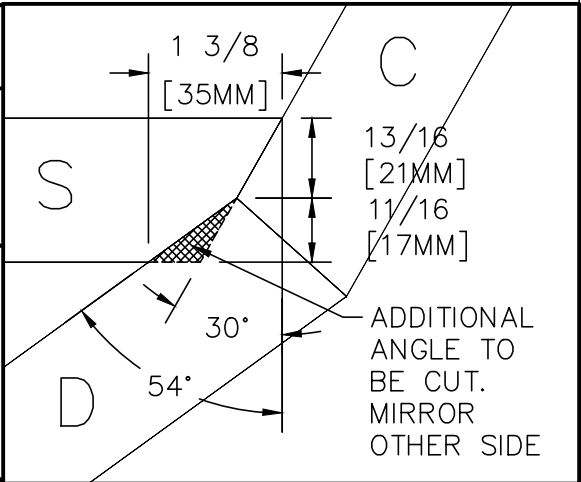
³ Screws may be substituted for nails to afford portability of floor.

* Board 'S' will require two cuts to meet the angle requirements. See Diagram SD-20-24 sheet 2 for more detail.





JOISTS



THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION FROM PACIFIC DOMES FOR THE PURPOSES OF DESIGN, SALE, AND SETUP OF PACIFIC DOMES PRODUCTS. ANY OTHER USE OF THIS DOCUMENT WITHOUT THE PERMISSION OF PACIFIC DOMES IS PROHIBITED BY LAW.

PACIFIC DOMES

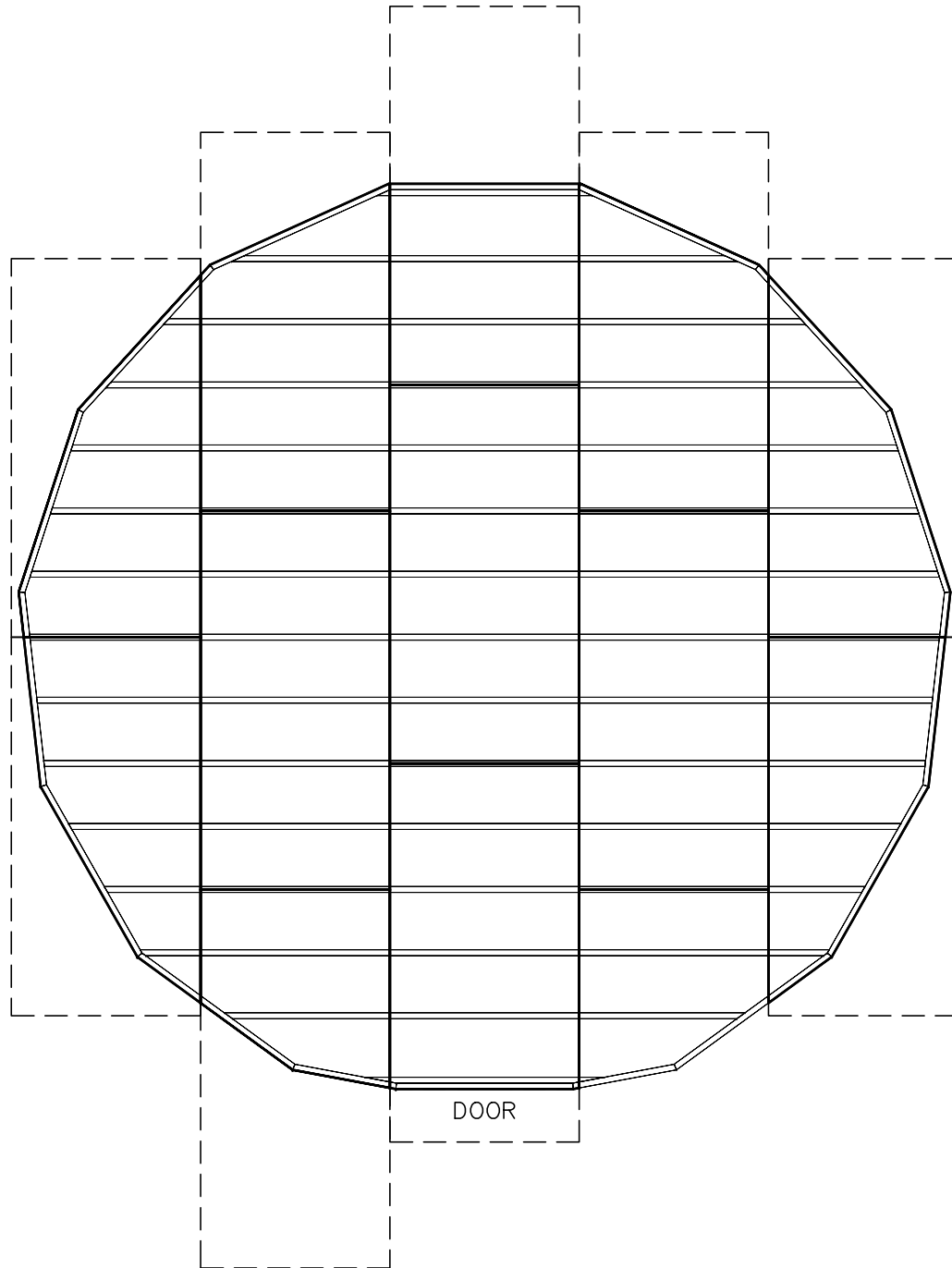
DRAWING NAME:
20-A PHD-38X81.75-4X6-JOIST

DRAWING NUMBER:
SD-20-24

DATE:
16 MAR 2022

DRAWN BY: PAGE:
NOT 2 OF 3

REV:
-



PLYWOOD

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION FROM PACIFIC DOMES FOR THE PURPOSES OF DESIGN, SALE, AND SETUP OF PACIFIC DOMES PRODUCTS. ANY OTHER USE OF THIS DOCUMENT WITHOUT THE PERMISSION OF PACIFIC DOMES IS PROHIBITED BY LAW.

PACIFIC DOMES

DRAWING NAME:
20-A PHD-38X81.75-4X6-JOIST

DRAWING NUMBER:
SD-20-24

DATE:
16 MAR 2022

DRAWN BY: PAGE:
NOT 3 OF 3

REV:
-