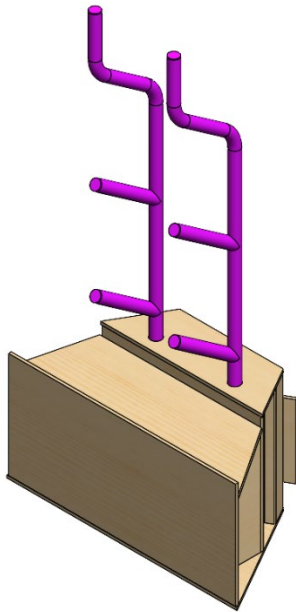


TE-25350 PIPE BASE



Description: This is a Pipe Base, designed so that teams can practice scoring Coral and removing Algae. 6 of these sections can be combined to simulate a full Reef and can accommodate a variety of Scoring Pipe designs. This Reef is designed for a paper or sticker April Tag to be added.

In this compressed folder, you will find all of the drawings, CAD Files and STEP Files for this design.

Drawings: For your convenience, all drawing files have been exported to PDF Format. Each major field assembly will have both assembly drawings and component drawings.

CAD Files: All SOLIDWORKS files required to build or modify the assembly.

STEP files: STEP files of the assembly are included for the convenience of non-SOLIDWORKS users.

IMPORTANT NOTE: There are no plans included here to make Scoring Pipes. There are options to purchase or build your own available through [AndyMark](#), [The Thrifty Bot](#), and [WestCoast Products](#). If these are not good options for your team consider building [TE-25300](#) (zip file - automatically downloads) instead, which can be made from parts found at local hardware stores.

Shopping List (if building multiple team element designs, plywood and lumber can be consolidated):

Plywood and Lumber (Example Cut List is at end of Readme):

- 2" x 4" x 10' Lumber – 1 Piece
- 4" x 4" x 6' Lumber – 1 Pieces (only 18" needed, but 6' is shortest common length)
- 2' x 2' x 1/8" Thick Hardboard – 1 Sheet (only 18" x 3.5" needed)
- 4' x 8' x 1/2" Thick Plywood – 1 Sheet

Hardware/Other:


- #8 Wood Screws x 1.5" long – Approximately 70 Pieces
- 1/4" Diameter Bolts or pins, at least 4 in. long - 2 Pieces
- 1-3/4" Forstner Bit or Hole Saw

Notes about materials:

- Plywood and Hardboard Sheets – quality of plywood is up to the user. Plywood of lower qualities may contain voids and may warp more than high quality plywood. All dimensions listed are “nominal”. For example, ½” plywood is typically 15/32”.
- Lumber - quality of lumber is up to the user. Please keep in mind that lumber of lower qualities may warp more than high quality lumber. All dimensions below are the “mill cut” dimensions. For example, 2” x 4” lumber is really 1½” x 3½”.

Example Cut List (All units are Inches):

2x4 Lumber:

Layout ID	Processed	Repetition	Stock length	Part length / Label		Qty	Cuts in layout			
A	0/1 	1x	120"	25 1/16" / TE-25359		3	The number of cuts			
				19 5/16" / TE-25360		2	5			
							Waste			
							Material remnant	5 9/16'		
							Cut	5/8'		
25 1/16" TE-25359			25 1/16" TE-25359			25 1/16" TE-25359		19 5/16" TE-25360	19 5/16" TE-25360	

4x4 Lumber:

Layout ID	Processed	Repetition	Stock length	Part length / Label	Qty	Cuts in layout
A	0/1 <input checked="" type="checkbox"/>	1x	72"	18' / TE-25357	1	The number of cuts
						1
						Waste
						Material remnant
						53 7/8'
						Cut
						1/8'
18" TE-25357						

1/8" Hardboard:

Layout ID	Repetition	Stock dimensions	Panel	Qty
A	1x	24" x 24"	18" x 3 1/2" / TE-25358	1
Cuts in layout				
The length of cuts			27 1/2"	
The number of cuts			2	

1/2" Plywood:

Layout ID	Processed	Repetition	Stock dimensions		
A	0/1	1x	96" x 48"		
				Panel	Qty
				37 13/16" x 18" / TE-25352	1
				37 1/4" x 17 7/16" / TE-25351	1
				37 1/8" x 9 1/2" / TE-25353	1
				19 5/16" x 26" / TE-25354	1
				9 5/16" x 17 1/2" / TE-25356	2
				26 9/16" x 8 1/2" / TE-25355	1
				12" x 3" / TE-25357	1
				Cuts in layout	
				The length of cuts	410 9/16"
				The number of cuts	15