TE-23004 CUBE SHELF ASSEMBLY



Description: This is a Cube Shelf, designed so that teams can practice without building a full GRID.

FILES INCLUDED

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.

SHOPPING LIST

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

- 4' x 8' x 1/2" Thick Plywood 1 Sheet
- 2" x 4" x 8' Lumber 5 Pieces

Hardware:

- 1/4-20 x 2" Long 20 Pieces
- 1/4-20 T-Nuts 20 Pieces
- #8 Wood Screws x 1.5" long Approximately 16 Pieces
- #8 Wood Screws x 3" Long Approximately 32 Pieces

NOTE ON HARDWARE: All bolts and t-nuts can be replaced with approximately 20 more #8 x 1.5" wood screws. The design uses these t-nuts and bolts to allow itself to be broken down into a much smaller footprint for packing. If this is not a concern for your team, wood screws will make for a sturdier assembly. Below is an image showing how much space you can save using nuts and bolts instead of wood screws.



Using the t-nuts and bolts allows the Cube Shelf to be 10.5" wide instead of 21.5" wide

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):

Repetition 1x			stock dimensions 96 x 48			Panel		Qty
		20	90 X 40			18.5 x 23.5 / TE-23	3026	1
18.5 x 23.5 / TE-23026	20 x 17 / TE-23024		17 x 17 / TE-23025 17 x 17 / TE-2		6.375 × 17	17 x 17 / TE-2302	ō	2
		16.5 x 18 / TE-23027		17 x 17 / TE-23025		17 x 20 / TE-23024	4	2
			23027 40.625 x 30.875			18.5 x 15 / TE-2302	28	
	18.5 x 15 / TE-23028	16.5 x 18 / TE-23027				16.5 x 18 / TE-230	27	2
	375 × 30.8							
18.5 x 4.25	8.5 x 15 / TE-23028							
Repetition	Stock length		Part lengtl	h / Label		Qty	Waste	
1x	96		33 / TE-23			2	Material remnant	0.62
			29 / TE-23	3020		1	Cut	0.37
3	3 / TE-23021			33 / TE-230	21		29 / TE-23020	
Repetition	Stock length							
1x	96		Part length / Label 10.5 / TE-23022			Qty	Waste Material remnant	4.875
			10.57 TE-2			1	Cut	0.62
			17 / TE-23			1		
				29 / TE-23020				
10.5 / TE-23022	17 / TE-2302	3 17	7 / TE-23023	17 / TE	-23019	9 2	9 / TE-23020	
Repetition	Stock length		Part length) / Label		Qty	Waste	
2x	96		34.5 / TE-23018			1	Material remnant	7
			54.25 / TE			1	Cut	0.25
3	4.5 / TE-23018				54.	.25 / TE-23005		
Repetition 1x	Stock length 96		Part length / Label Qty			Qty	Waste	
			10.5 / TE-23022			1	Material remnant	68.2
			17 / TE-23			Cut	0.2	