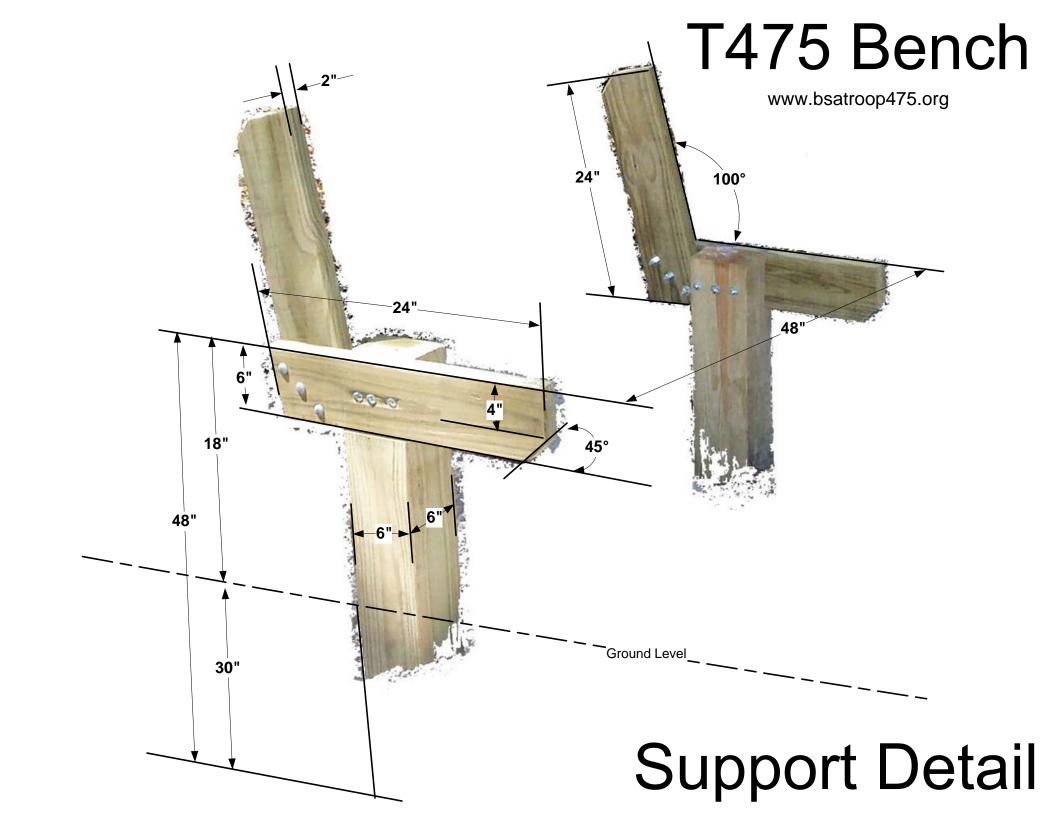
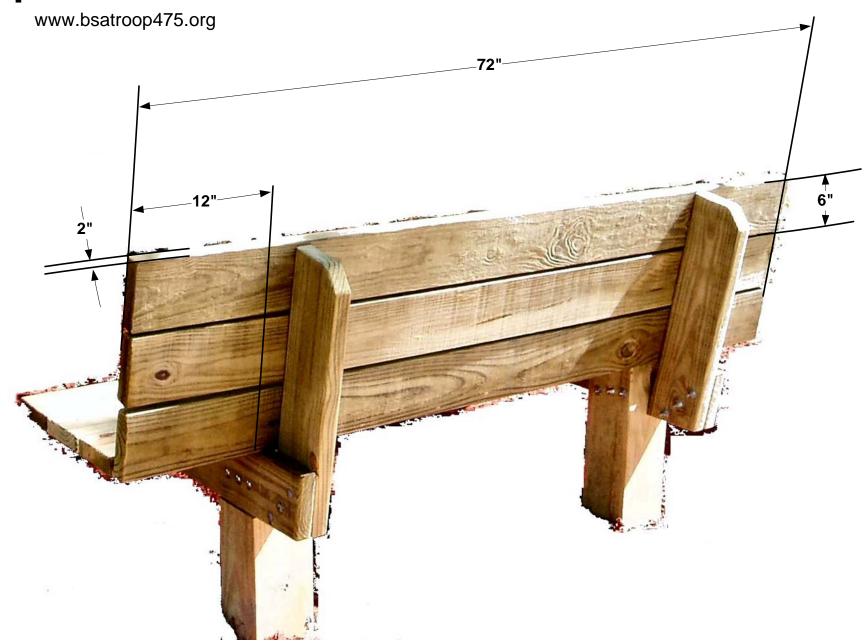
Troop 475 Bench



Quantity	Size	Description
2	6" x 6" x 4"	Posts – Pressure Treated
4	2" x 6" x 2'	Bench Supports – Pressure Treated
6	2" x 6" x 6'	Bench Seat & Back – Pressure Treated
6	3/8" x 7"	Carriage Bolts to Secure Bench Supports to Posts
6	3/8" x 5"	Carriage Bolts for Bench Supports
12	3/8 x 1" Dia	Flatwasher for bolts
12	3/8"	Lockwashers for bolts
12	3/8"	Nuts for bolts
24	1 3/4" #10	Galvanized Wood Screws to Secure Seat & Back to Supports
4	80lb	Bags Quickcrete – 2 Bags / Post



Troop 475 Bench



Rear Detail

Troop 475 Bench

www.bsatroop475.org

- 1. Lumber dimensions are based on dimensional sizes
- 2. Cuts should be based on actual size of lumber
- 3. Purchase lumber several weeks in advance and store in a dry area such as a garage so that the moisture in the lumber can stabilize to local conditions and size
- 4. Use only pressure treated lumber
- 5. Get the lumber yard to cut as much as possible for you
- 6. 6 x 6 posts come in 8 foot lengths and most places will not cut them in half. Be prepared to make multiple cuts with a circular saw, radial arm saw, sawzall, etc.
- 7. Match each post with a specific seat 2 x 6 support brace
 - a. Due to shrinkage, not all pieces will be the same size
 - b. Use the specific seat brace to measure and cut the notch in the 6 x 6 so that it fits the seat brace
 - c. Use a circular saw set to the proper depth to create the cut for the shoulder that the brace will rest upon
 - d. Use a plunge router to remove the remaining notch material. Make 2 passes. The first halfway down then the remaining
- 8. Pre-drill the holes for the 3/8" bolts in both the braces and posts
 - a. Use a piece of plywood to create a drilling template
 - b. Keep the seat & back brace & post matched as a set
 - c. We used a drill press and a spade bit to start the holes and to ensure they were straight. We used an auger bit and a hand drill to complete the hole

- 9. The bottom corner of the back brace should butt against the 6 x 6 post
- 10. Assemble seat & back brace & post as a unit
- 11. Use a 3/8" quarter round router bit to round-over all4 sides of the faces of the bench seat and back boards
- 12. Round over a bull nose for the front seat edge and and the top board of the back support
- 13. Use a vibrating sander or random orbit sander to smooth the faces & the 4 corners of the seat and back
- 14. Label the back sides of each board for its position
- 15. Water seal all lumber. Let dry 2 − 3 days.
- 16. The top board of the back should be level with the tops of the back braces. Use a 3/8 bolt as a spacer between each of the boards.
- 17. The front of the seat board should be even with the ends of the seat braces. The rear seat board should be slightly forward of the bottom back board so that any water will drip clear of the seat
- 18. Top of the seat board should be 18 19 " above grade
- 19. Dig the holes to approximate depth making them large enough for all of the concrete to be poured.
- 20. Pre-drill and screw the seat & back boards to the braces above ground. Use sawhorses to support the posts.
- 21. Each assembled bench is about 100 pounds. Get enough manpower to lower them into the holes.
- 22. Level & square the posts then pour concrete & water
- 23. Backfill post holes with dirt
- 24. Let dry for at least 24 hours
- 25. Have a seat!

Notes