ProWood® Project Plan

FULL-SIZE PICNIC TABLE

With ProWood® Professional Grade pressure-treated lumber, you can expand and enjoy your outdoor-living environment by easily building this traditional and practical full-size picnic table in a day. *See fig 1.*

Materials:

- Five 2"x10"x8' ProWood® lumber
- Three 2"x6"x10' ProWood® lumber
- Three 2"x4"x8' ProWood® lumber
- One box of 3" #8 exterior wood screws
- Sixteen 1/4"-20x3" galvanized carriage bolts
- Sixteen 1/4" washers
- Sixteen 1/4" nuts

Optional:

- Exterior-grade wood glue

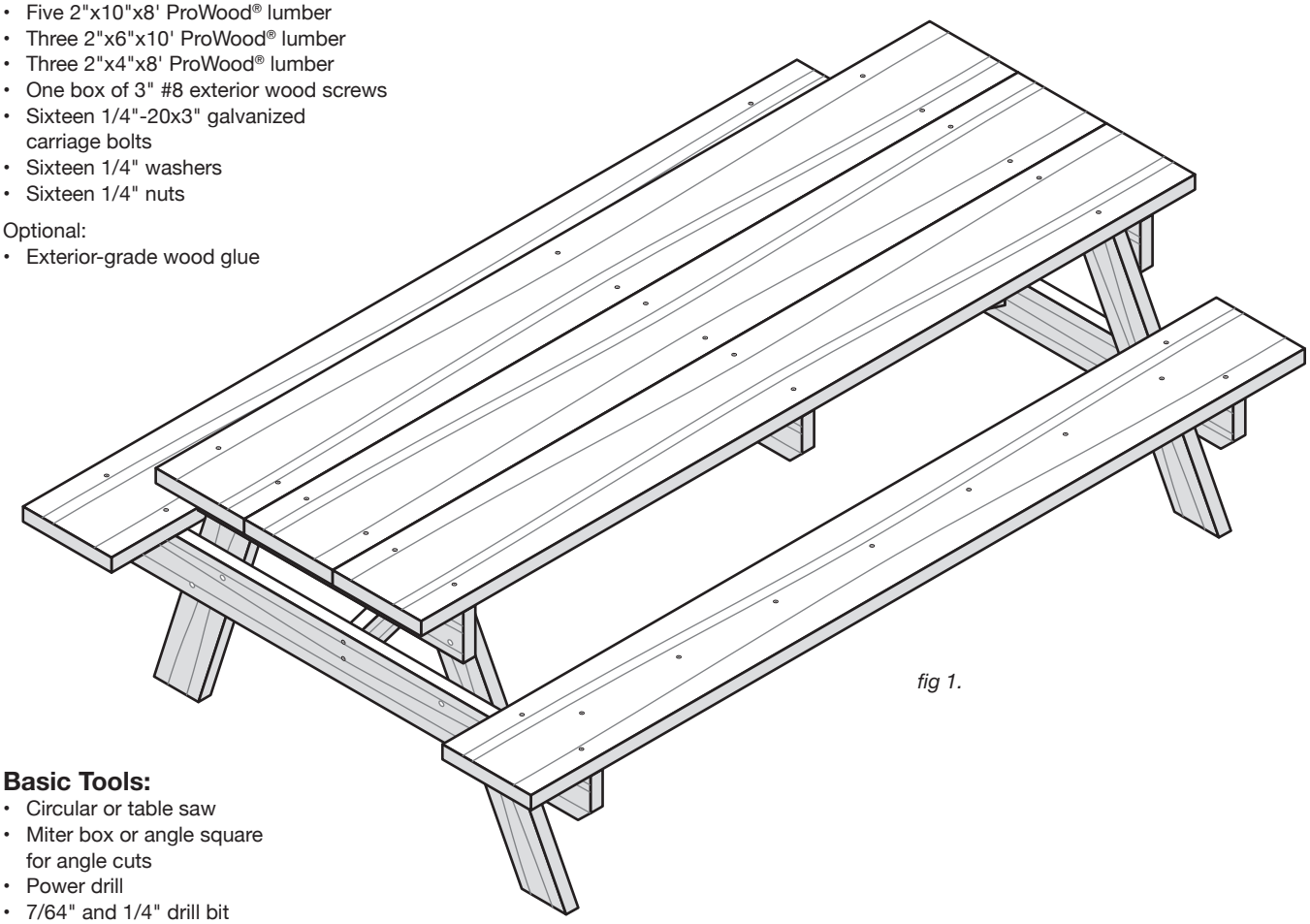


fig 1.

Basic Tools:

- Circular or table saw
- Miter box or angle square for angle cuts
- Power drill
- 7/64" and 1/4" drill bit
- 1/8" countersink bit
- 3/4" spade bit
- Screwdriver (or power drill with screwdriving bit)
- Tape measure
- Carpenter's square

prowood® PROFESSIONAL GRADE™

If your wood project touches the ground, use pressure-treated lumber that is rated for ground contact to ensure long-term performance.

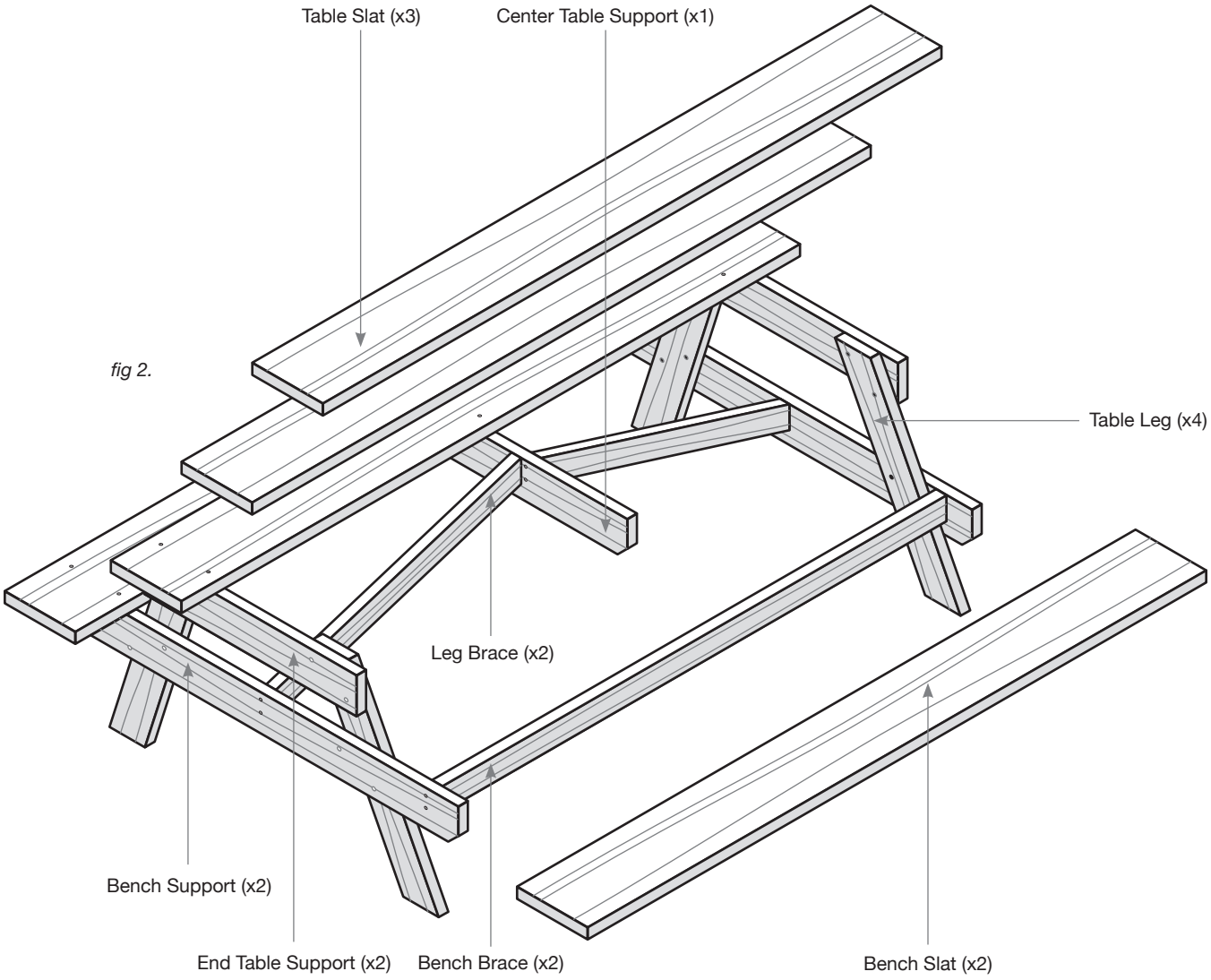


fig 2.

Cut Wood to Size

Caution: Always wear gloves, a dust mask and eye protection when sawing, sanding or machining wood. Always use a circular or table saw on a clean, flat and level surface.

Lumber

See fig 2. for the cut wood project components.

Measure and cut (if needed) the five 2"x10"x8' lumber to the following sizes:

- Table Slat (3): 2"x10"x8'
- Bench Slat (2): 2"x10"x8'

Measure and cut the three 2"x6"x10' lumber to the following sizes:

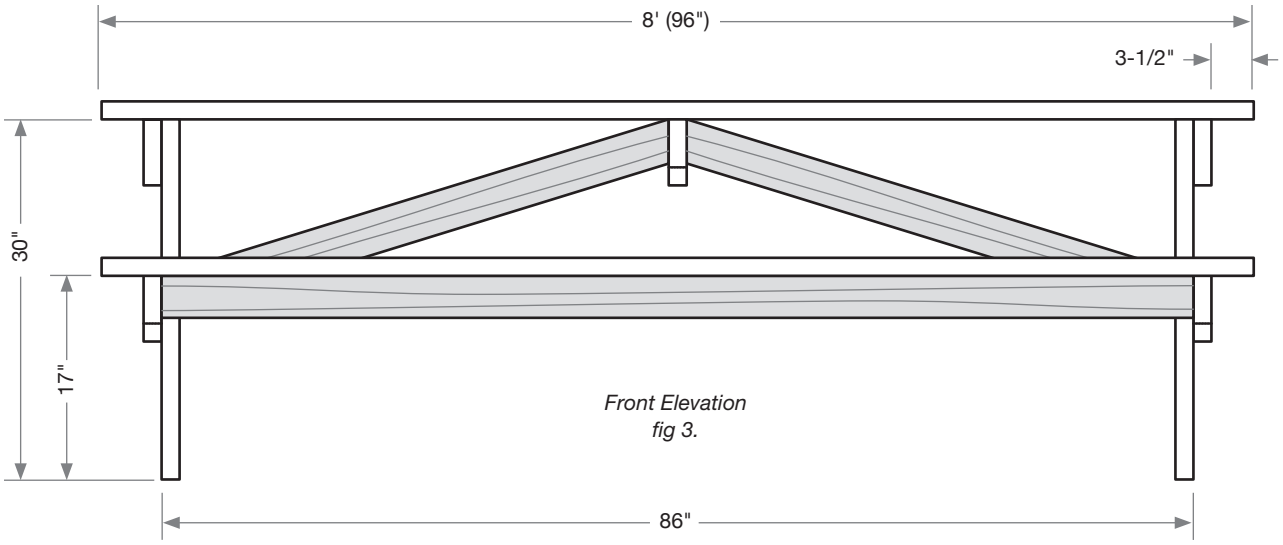
- Bench Support (2): 2"x6"x5'
  Each bench support will need two miter cuts later in the process.
- End Table Support (2): 2"x6"x26-1/2"
- Center Table Support (1): 2"x6"x26-1/2"
  The center table support will need two miter cuts later in the process.
- Table Leg (4): 2"x6"x37-7/8"

Measure and cut the three 2”x4”x8’ lumber to the following sizes:

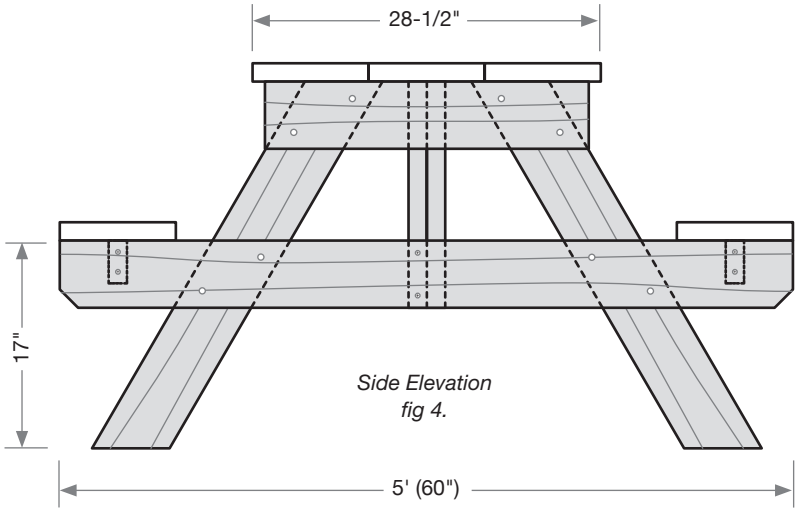
- Bench Brace (2): 2”x4”x86”
- Leg Brace (2): 2”x4”x45-1/4”
  Each leg brace will need two miter cuts later in the process.

General Assembly Tips

- Establish a screw pattern to enhance the overall look and feel of the final assembled product.
- Pre-drill all screw holes with a 7/64" drill bit to ease screw insertion and prevent wood splitting.
- Countersink all screws so the head of a countersunk screw, when placed in the hole, will sit flush with the surface of the surrounding material.
- Use exterior-grade wood glue to help strengthen all fastened components.



Front Elevation
fig 3.



Side Elevation
fig 4.

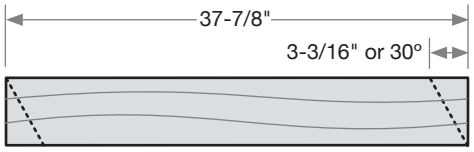


Table Leg Miter Cut
fig 5.

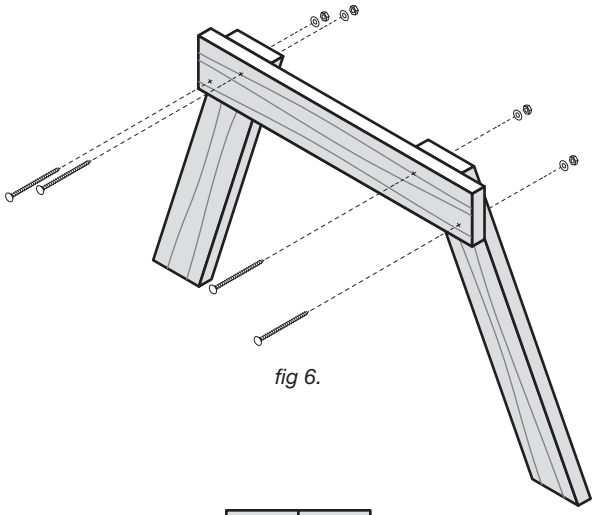


fig 6.

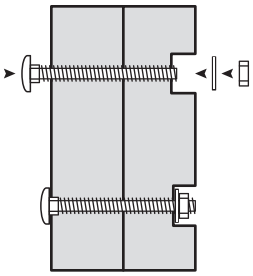
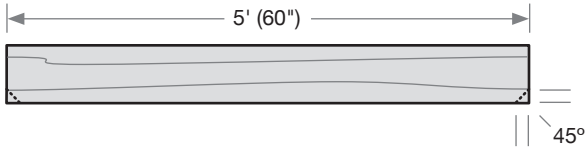


fig 7.



Bench Support Miter Cut
fig 8.

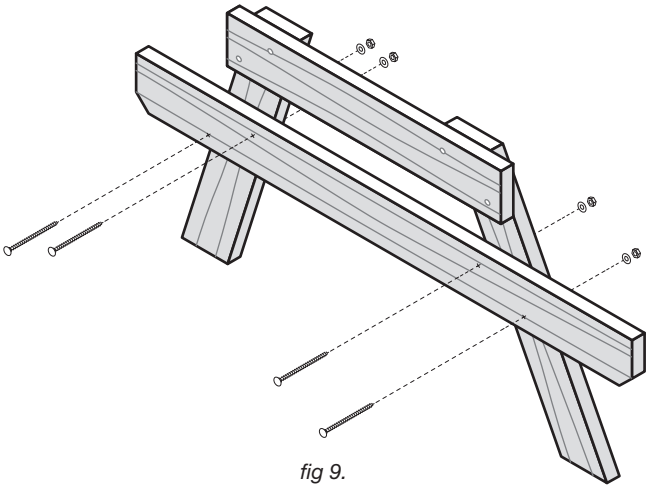


fig 9.

Build the Base

Angle Cut the Table Legs

See fig 5.

- From two opposite corners of each leg, measure and mark parallel 30-degree angles (or 3-3/16" in from opposite corners).
- Use a miter box and cut the angles.
- Make sure all four table legs are evenly cut the same way.

Attach End Table Supports

See fig 4, 6 and 7.

Assembly advantage: the carriage bolts for this project are only as wide as two attached pieces of lumber so there will be no potentially damaging or harmful bolt sticking through.

- Align a pair of table legs with an end table support. Make sure the top diagonal cut of each leg is flush with the outer edge of the end table support.
- Mark two holes inside opposite corners of the longest overlapping angles for maximum strength of the attachments.
- Use a 3/4" spade bit and countersink the holes about 1/2" deep. The washers and nuts will go on the inside of the legs and nest within the countersunk holes.
- Use a 1/4" bit and drill through the center of the countersunk holes and all the way through both boards.
- Insert a 1/4"-20x3" carriage bolt into each 1/4" hole. From the backside, slip a 1/4" washer onto each bolt, then fasten tightly with the 1/4" nuts.
- Repeat this assembly process for the other leg.

Miter Cut Bench Supports

See fig 8.

- Measure and mark a 45-degree angle 1-1/2" in from opposite same-side corners of the two 2"x6"x5' bench supports.
- Use a miter box and cut the angles.

Attach Bench Supports

See fig 4, 7 and 9.

Assembly advantage: the carriage bolts for this project are only as wide as the wood so there will be no potentially damaging or harmful bolt sticking through.

- Measure and mark a line on each table leg that is 17" up from the bottom of its respective leg.
- With its miter cuts facing down, place and align the top edge of a bench support with the line mark while also centering that support between the two legs. Make sure both end table and bench supports are parallel to each other.
- Mark two holes inside opposite corners of the longest overlapping angles for maximum strength of the attachments.
- Use a 3/4" spade bit and countersink the holes about 1/2" deep. The washers and nuts will go on the inside of the legs and nest within the countersunk holes.
- Use a 1/4" bit and drill through the center of the countersunk holes and all the way through both boards.
- Insert a 1/4"-20x3" carriage bolt into each 1/4" hole. From the backside, slip one 1/4" washer onto each bolt, then fasten tightly with the 1/4" nuts.
- Repeat this process for the other leg and its bench support.

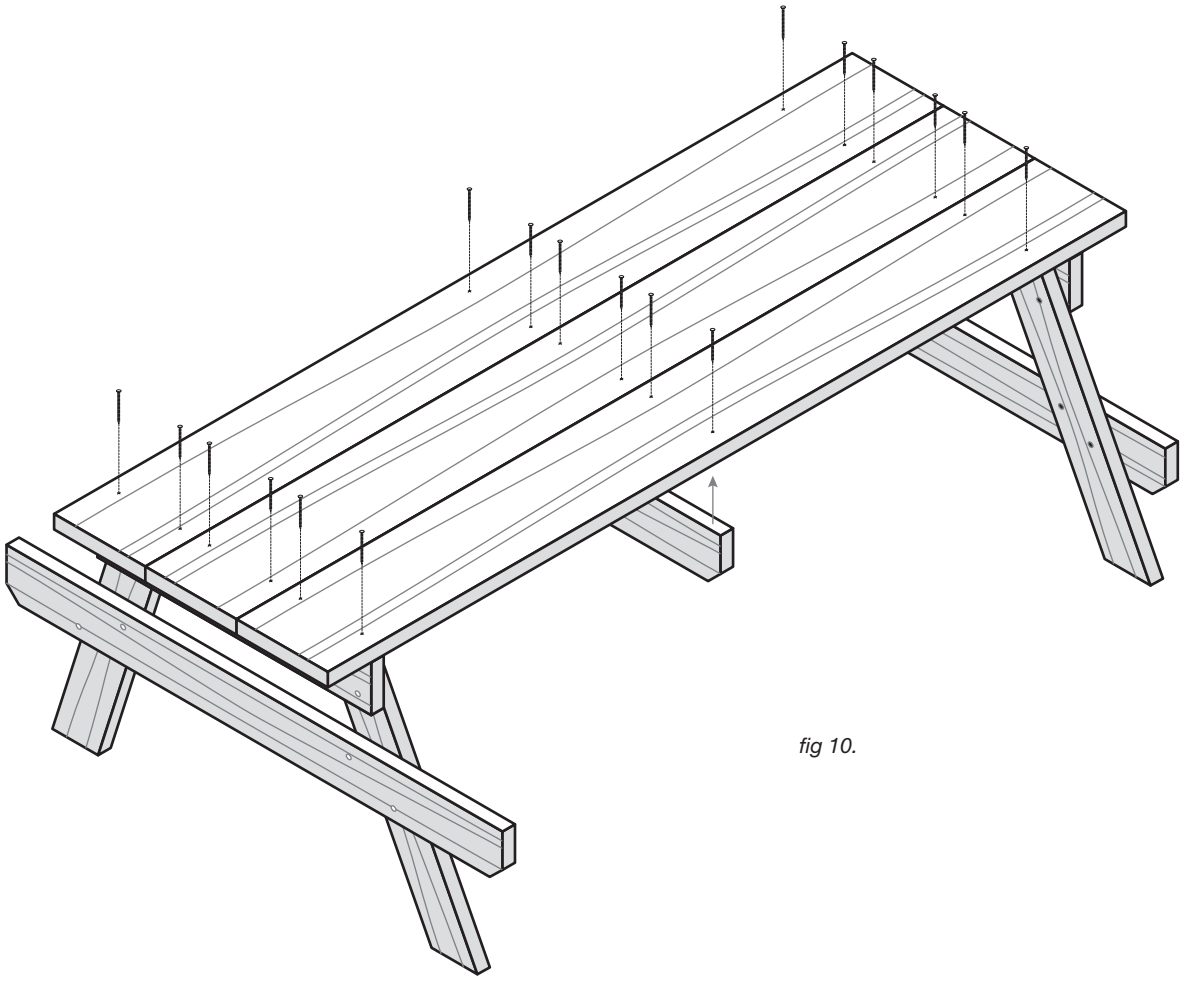


fig 10.

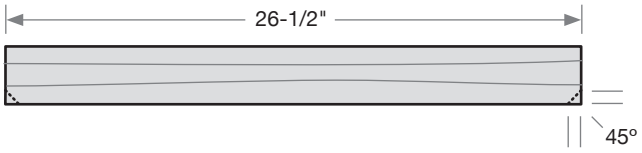
Build the Tabletop

Attach Table Slats to Leg Assemblies

See fig 3, 4 and 10.

Tip: When building the tabletop, keep the more desirable side of the 2"x10"x8' boards facing up for the best appearance.

- Start this assembly by measuring and marking the center ends of one 2"x10"x8' table slat and one leg assembly. Make sure the end table support faces the outside while its legs face the inside.
- Measure and mark a parallel line 3-1/2" in from the outside edges of the table slat.
- Turn the table slat upside down and align its parallel line with the outside edge of the end table support.
- Use a 7/64" drill bit and pre-drill two pilot holes through the table slat and into the end table support.
- Use a 1/8" countersink bit on both holes.
- Attach with glue and 3" #8 exterior wood screws.
- Repeat this process for the other end of the table slat and its leg assembly.
- Use the same process for attaching the other two table slats to the leg assemblies. Making sure that the table slats are tightly spaced and parallel to each other.

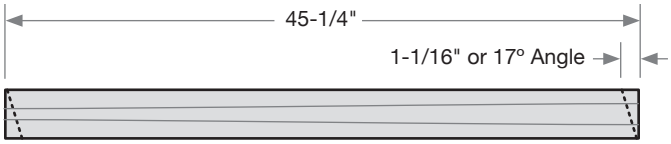


Center Table Support Miter Cut
fig 11.

Miter Cut and Attach Center Table Support

See fig 10 and 11.

- Measure and mark a 45-degree angle 1-1/2" in from opposite same-side corners of the 2"x6"x26-1/2" center table support.
- Use a miter box and cut the angles.
- Center the center table support on the underside of the table slats. Make sure the miter cuts of the center table support are facing down.
- Use a 7/64" drill bit and pre-drill two pilot holes through each table slat and into the center table support.
- Use a 1/8" countersink bit on both holes.
- Attach with glue and 3" #8 exterior wood screws.



Leg Brace Miter Cut
fig 12.

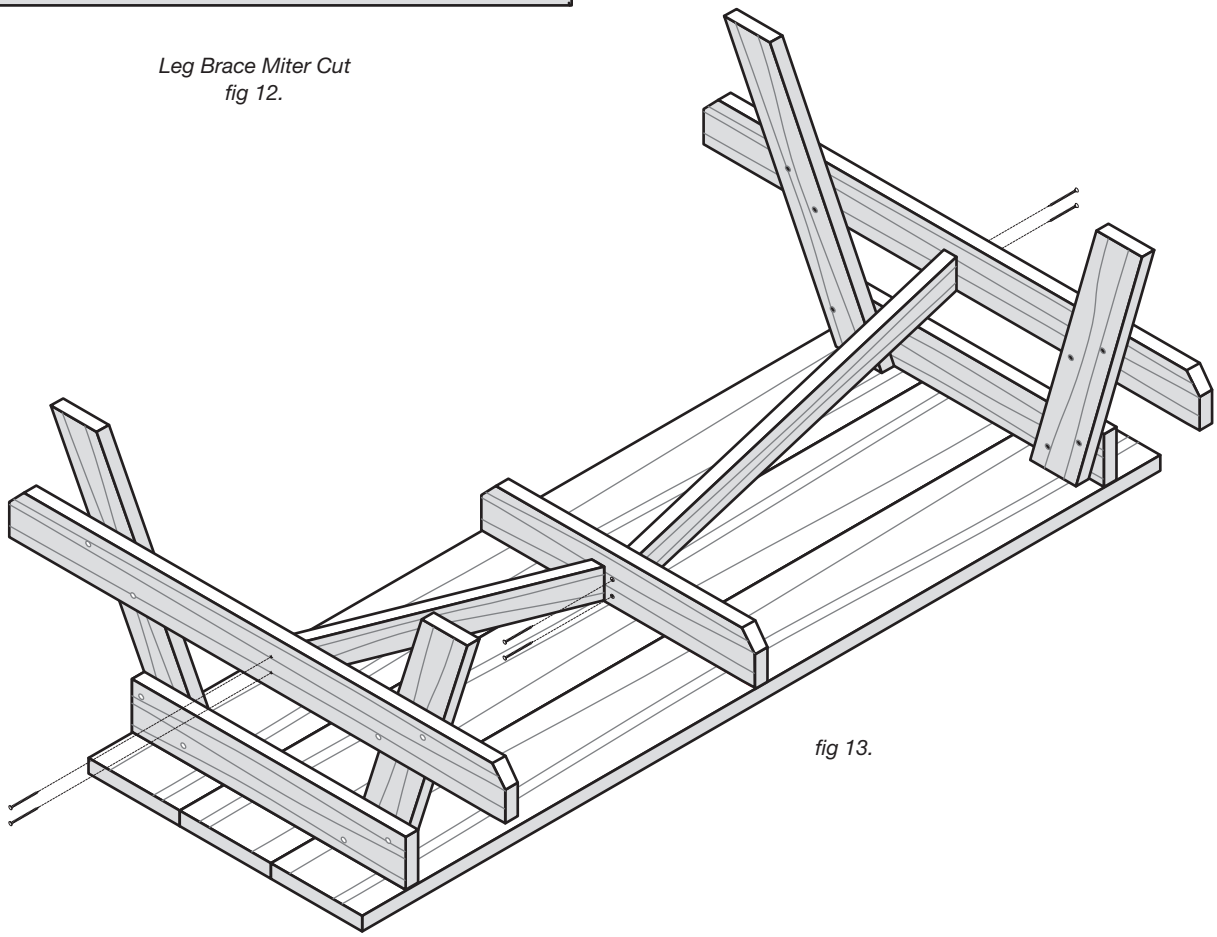


fig 13.

Miter Cut and Attach Leg Braces
See fig 2, 3, 12 and 13.
Tip: To insure an exact fit, measure the distances between the sides of the center table support and the inside top of its respective bench support.

- Carefully turn the tabletop and leg assemblies upside down.
- Make sure the leg assemblies are square with the tabletop (the leg braces will help hold them square once they are attached).
- Measure and mark two opposite corners of one 2"x4"x45-1/4" leg brace, 1-1/16" in from its outside edge. Connect that mark with its respective corner. Both marks need to be parallel to each other.
- Use a miter box and cut the two angles.
- Repeat this process for the other leg brace.
- Position the leg braces offset from each other so they can be screwed from opposite sides of the center table support and the bench supports. Make sure the miter cuts are flush with the surfaces they contact.
- Use a 7/64" drill bit and pre-drill two pilot holes through the center table support and the outside of a bench support into the leg brace.
- Use a 1/8" countersink bit on the four holes.
- Attach with glue and 3" #8 exterior wood screws.
- Repeat this process and attach the other leg brace.
- Carefully turn the tabletop and leg assemblies right side up.

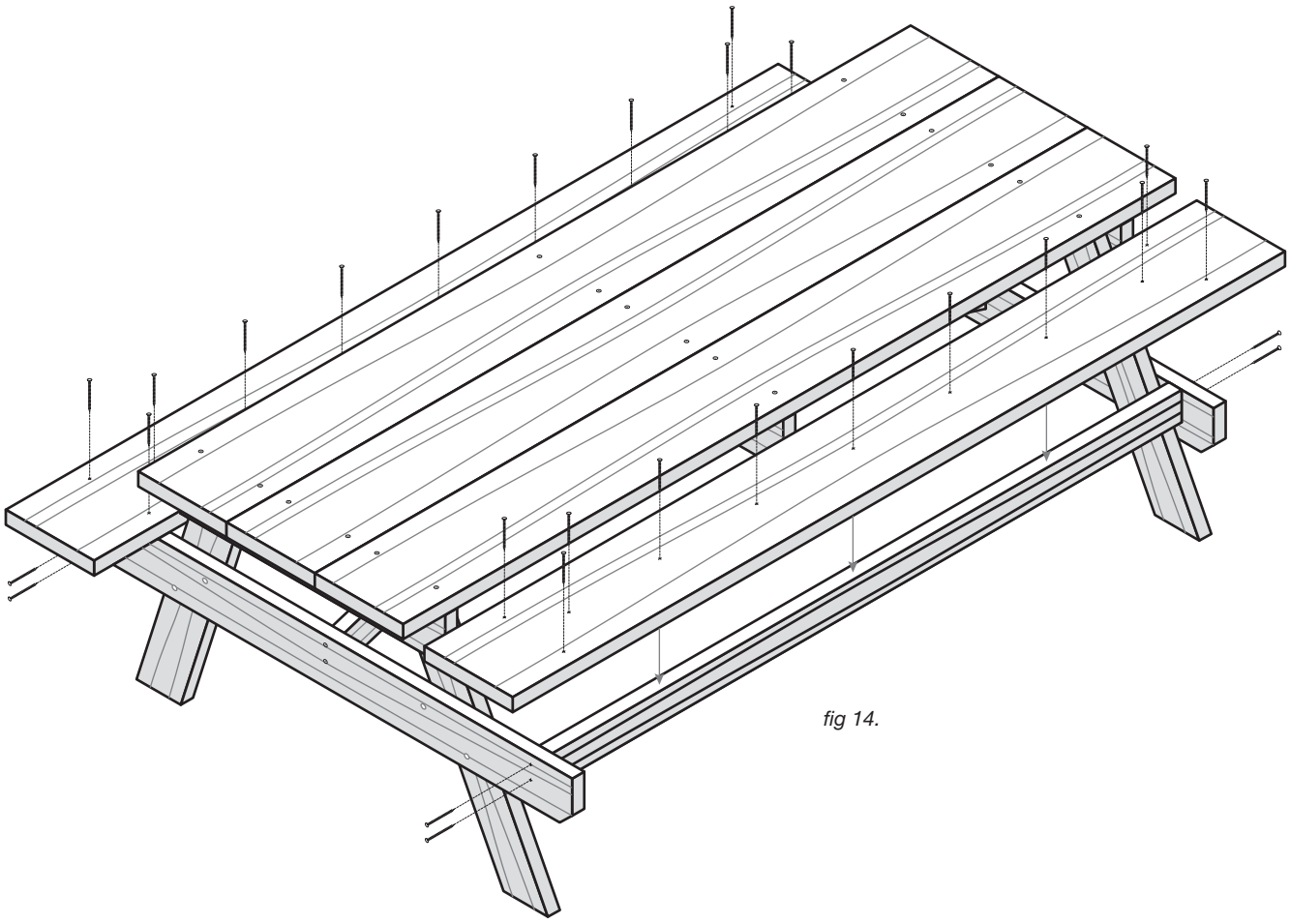


fig 14.

Build the Benches

Attach Bench Braces to Bench Supports

See fig 2, 3 and 14.

Tip: Before assembly, measure the distances between the bench supports to insure the table is square.

- Measure and mark a line 4-3/4" in from the outside edge and on the top of each bench support.
- Measure and mark a center line on the top edge of the two 2"x4"x5' bench support boards.
- Place and center a bench brace on the inside of the two bench supports.
- Use a 7/64" drill bit and pre-drill two pilot holes through the outside of each bench support and into the ends of the bench brace.
- Use a 1/8" countersink bit on the four holes.
- Attach with glue and 3" #8 exterior wood screws.
- Repeat this process and attach the other bench brace to its bench supports.

Attach Bench Slats to Bench Braces and Bench Supports

See fig 2, 3 and 14.

- Measure and mark a center line on the outside edge of the two 2"x10"x8' bench slats.
- Place and center a bench slat on top of the bench supports on one side of the table. The two ends of the bench slat should have an equal (approximately 3-1/2") outside overhang.
- Use a 7/64" drill bit and pre-drill two pilot holes through the top of the bench slat and into the outside top of a bench support.
- Use a 1/8" countersink bit on each of the two holes.
- Attach with glue and 3" #8 exterior wood screws.
- Measure and mark lines 12" apart on top and along the center of the bench slat.
- Use a 7/64" drill bit and pre-drill two pilot holes through the top of the bench slat and into the outside top of a bench brace.
- Use a 1/8" countersink bit on each of the two holes.
- Attach with glue and 3" #8 exterior wood screws.
- Repeat this process and attach the other bench slat to its bench brace and supports.