

Low-Cost Field Perimeter Guide

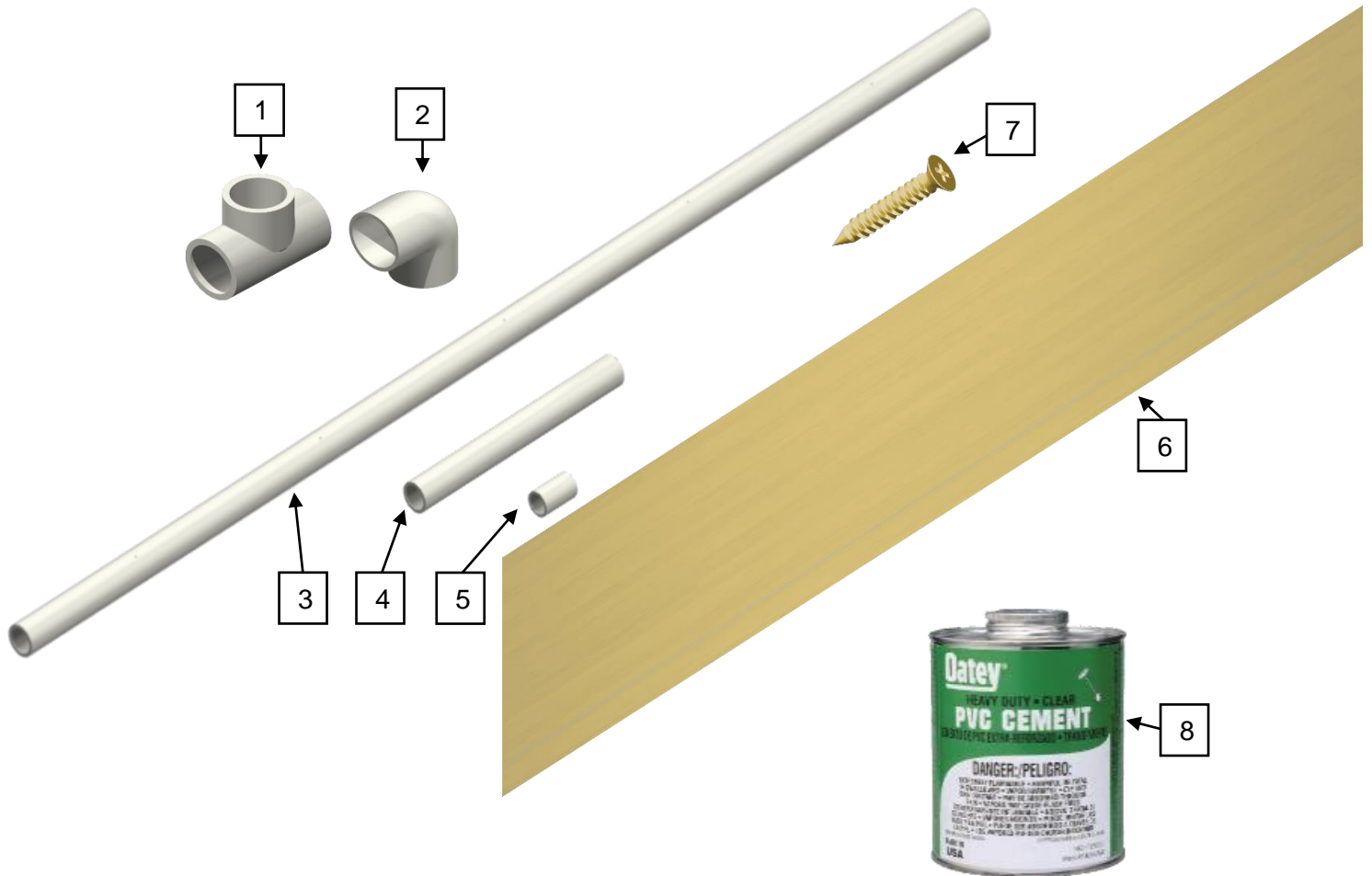


Revision History		
Revision	Date	Description
1	7/11/2023	Initial Release

Shopping and Parts Guide

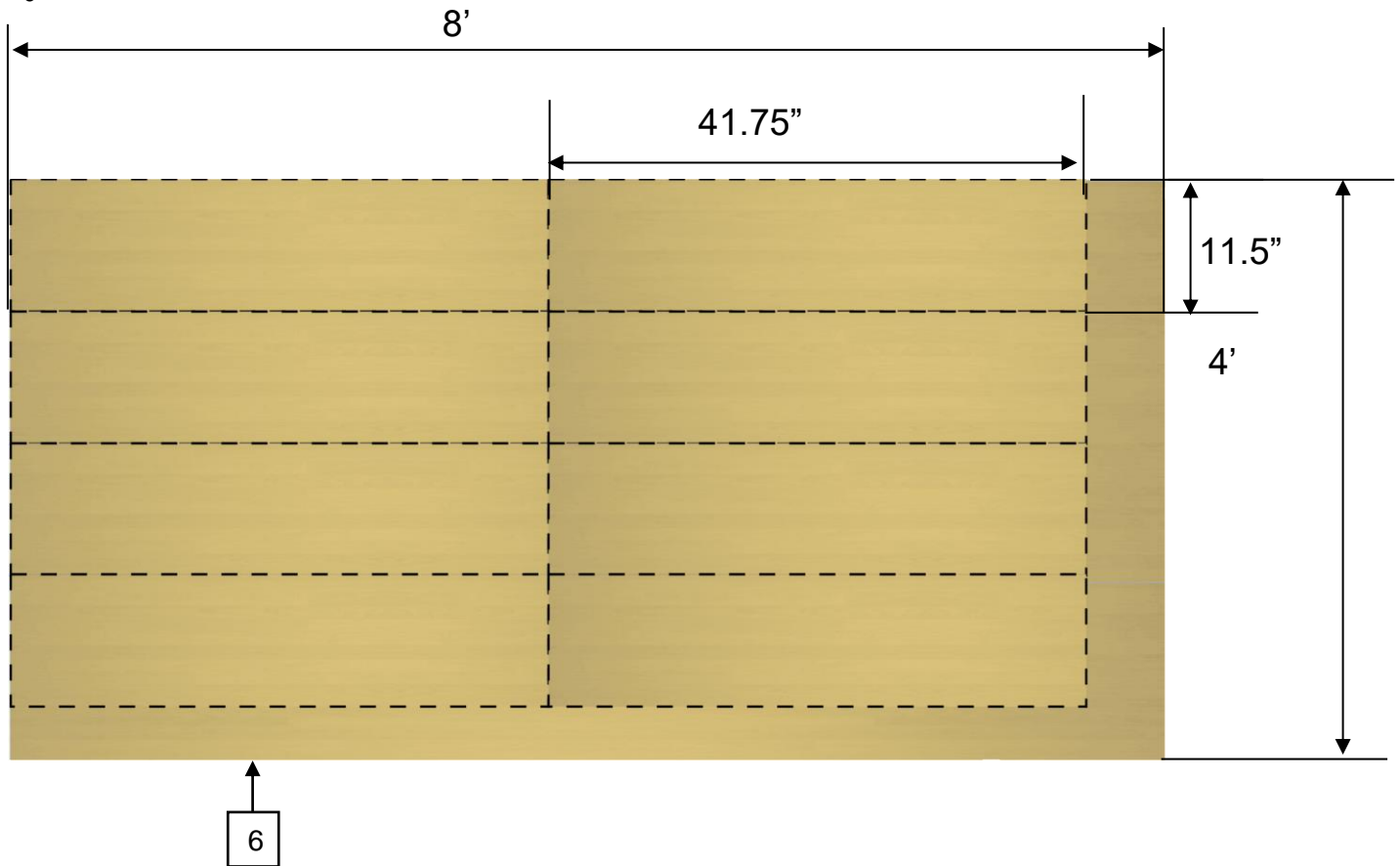
Item	Description	Assembly Quantity Required	Item Packaged	Home Depot Store Sku*	Quantity to Buy	Est. Unit Price	Total Price
1	PVC Tee-Joint	32	1 per/package	187917	32	\$0.82	\$26.24
2	PVC 90° Elbow Joint	8	1 per/package	187976	8	\$0.79	\$6.32
3	43.5" Long PVC Pipe	24	10' x ¾" pipe	193712	12	\$6.29	\$75.48
4	9.3" Long PVC Pipe	16					
5	1.75" Long PVC Pipe	16					
6	47.75" x 95.7" x .115 Hardboard Panels	12	4' x 8' x .125 sheets	832777	2	\$13.98	\$27.96
7	#8 x ¾" Wood Screws	120	100 per/package	251364	2	\$7.97	\$15.94
8	8 oz. PVC Cement	As Needed	single can	187100	1 Can	\$7.96	\$7.96
Estimated Cost Before Taxes							\$159.90

*Home Depot is given as a convenient reference. These materials are widely available at most hardware stores, and prices will vary. (Costs updated 10/6/2020)

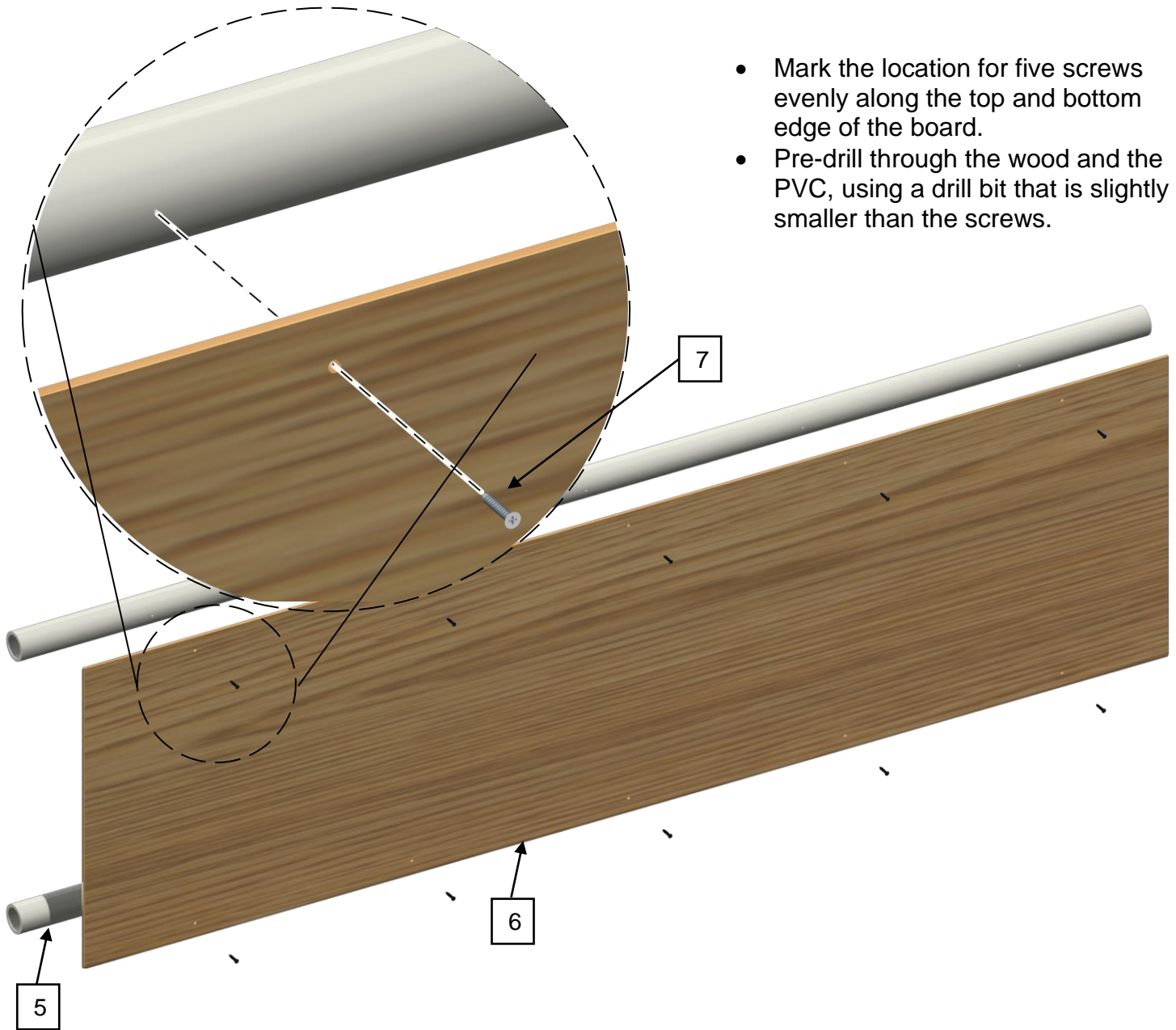


Cut Sheet Template

- Use the template below to cut side panels from a 4' x 8' x .125" sheet of hard board.
- Each sheet should yield 8 panels.
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Drill Holes and Attach the Panels to PVC



- Mark the location for five screws evenly along the top and bottom edge of the board.
- Pre-drill through the wood and the PVC, using a drill bit that is slightly smaller than the screws.

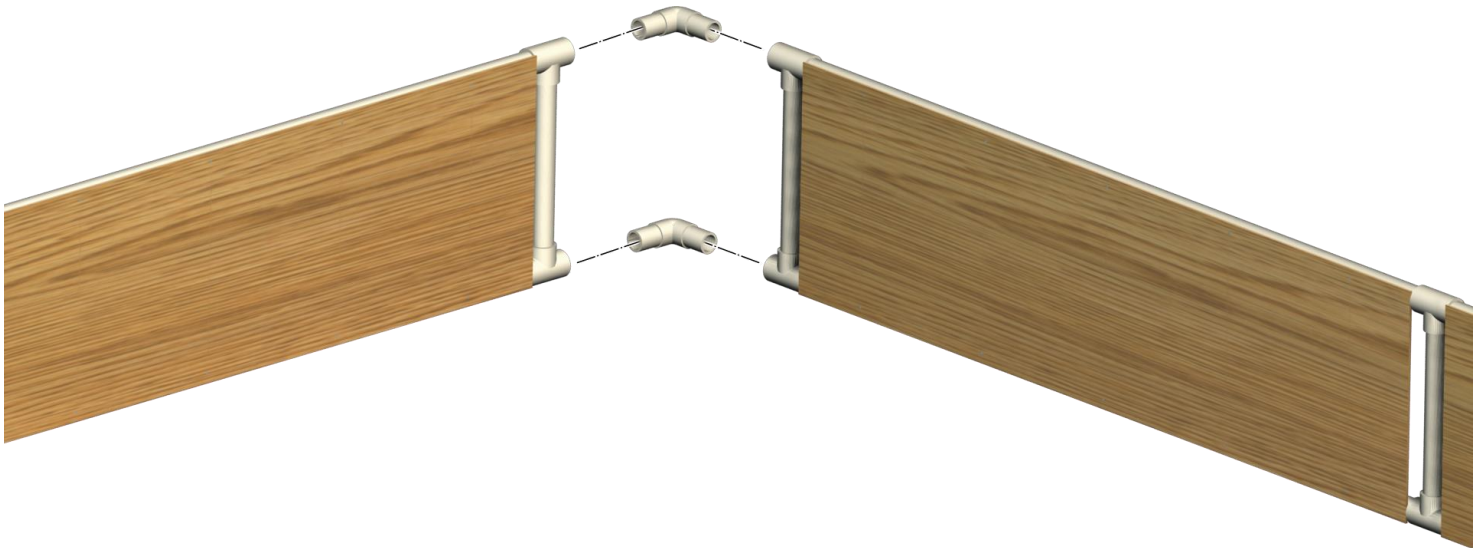
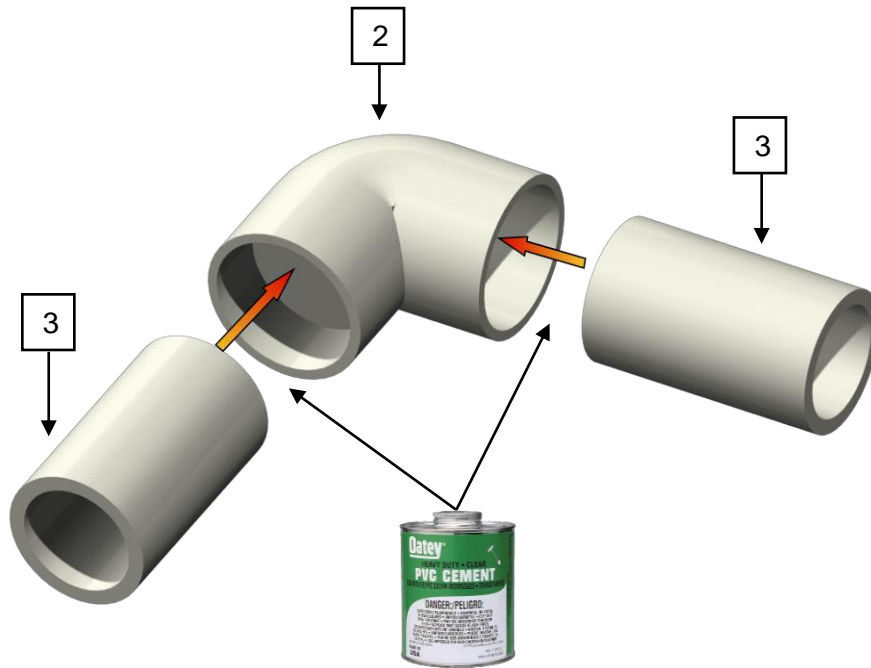
Field Side Wall Sub-Assembly

- Each wall assembly consists of two outer panels and one center panel.
- Assemble the outer panels, as shown. Use PVC cement to ensure a rigid fit.
- Leave the center panel's PVC pipe unglued to allow for easy assembly and disassembly of your field.



Prepare the Joint Corners

- Assemble eight corner pieces, as shown.
- Use PVC cement to secure the pieces together.
- Assemble the field walls at the corners, as shown.



PVC Cleaning and Cementing Tips

Cleaning:

When you purchase PVC pipe, it is likely that it will be dirty and covered with manufacturer's markings. For best presentation at official competitions, it is best to clean the PVC.

Here are a few suggestions on ways clean your PVC.

The Kitchen Sink Approach:

Wipe off any loose dust with a damp rag. Then dab a little household powdered cleanser onto a green nylon scouring pad, dampen and simply rub off the markings. Rinse with a damp rag. This method also removes most other marks and dirt without scratching the surface of the PVC.

Caution: Wear rubber gloves and safety glasses. Be sure to follow the directions on the cleanser.



For more difficult imprints:

- Soak a small chunk of fine steel wool (grade #0000 or #00) in acetone.
- Because the acetone dries quickly, work in short sections of one or two feet.
- Wipe smears quickly with a shop rag before the acetone dries.

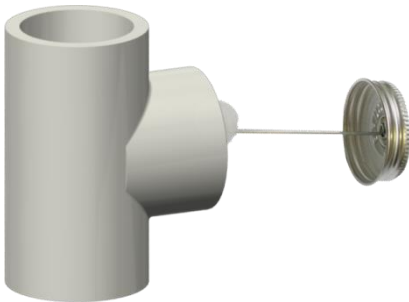
Caution: Wear rubber gloves and safety glasses. Be sure to follow the directions on the acetone container. Work in a well-ventilated area.



A non-chemical alternative to cleaning the PVC:

Lightly sand blemishes and imprints with a low-cost 3M sanding pad. Use medium-grade for tougher inks, fine-grade for lighter inks. You'll find them at most hardware stores.

The sanding pads conform to the pipe's contour and will quickly remove markings with just light pressure. Use a damp cloth to clean away dust left behind from the sanding.



Cementing:

Swab a light amount of glue inside the fitting, insert the pipe into the fitting. PVC cement dries fast, so you'll have to be quick. Hold the fitting and pipe together for a few seconds, then wipe off any excess glue *immediately* with a rag.

Caution: Wear rubber gloves and safety glasses. Be sure to follow the directions on the cement container. Work in a well-ventilated area.

