

# The finish line

A Forest Products Laboratory finishing factsheet



## Construction of a Dip-Tank for Finishing Wood Siding or Decking

Dipping new siding or decking pieces before installation is faster than finishing after installation, and it gets finish on the backside and ends of the pieces, thereby extending their service life. This method is appropriate for any penetrating finish, such as water-repellent preservatives or semitransparent stains. It may also be used to pre-treat siding with water-repellent preservative before painting, which can greatly extend the service life of the paint.

### Materials

- 2 by 4's or 2 by 2's
- 4- by 8-foot panel products (plywood or OSB)
- Drywall screws (see Tips)
- 4-mil plastic (enough for two layers in the tank and a covering for the drain board)

Although more costly, consider using plywood for the tank—setting screw heads in OSB can be difficult, and exposed screw heads are likely to puncture the plastic. Avoid using plastic thicker than 4 mil—it can crimp and crack in the tight corners.

### Construction

The tank should be 1 to 2 inches wider and about 6 inches longer than the siding or decking boards, and about 8 inches deep.

Ideally, the bottom 2 by 4's (or 2 by 2's) [A] are single pieces that run the entire length of the tank. If they are pieced together from shorter lengths, take care that joints in the 2 by 4's do not align with joints in the tank bottom [B] or sides [C].

Cut plywood (or OSB) bottom pieces [B] to the width of the tank,

and screw them to the bottom 2 by 4's [A]. Also screw plywood side pieces [C] (9½ inches wide for 8-inch tank depth) to the bottom 2 by 4's. Screw small 2 by 4 pieces [D] at the ends of the tank for fastening the plywood end caps [E]. Use additional small 2 by 4 pieces to reinforce any joints along each side [C].

A length of 2 by 4 along the top of one side [C] of the tank may be used to fasten the drain board to the tank. The opposite edge of the drain board rests on (and should be attached to) saw horses.

Line the tank with two layers of plastic. Stapling the plastic to the top edge of the tank helps to keep it in place.

To make the drip racks [F], space screws or nails 1 to 2 inches apart along two 2 by 4's; test the spacing before going too far. After covering the drain board with plastic, clamp or otherwise attach the drip racks only at the top of the drain board.

### Dipping

Remove loose fibers and sawdust on each siding or decking piece before dipping. Brushing with a stiff bristle broom works well for this; additional loose fibers can be removed by tapping on the board or tapping it against something solid.

Wearing long rubber gloves, dip each piece in the tank for 10 to 30 seconds. With stains, it may be necessary to slosh each piece up and down a few times to keep the pigments suspended. Brushing with a stiff bristle broom improves the finish absorption.

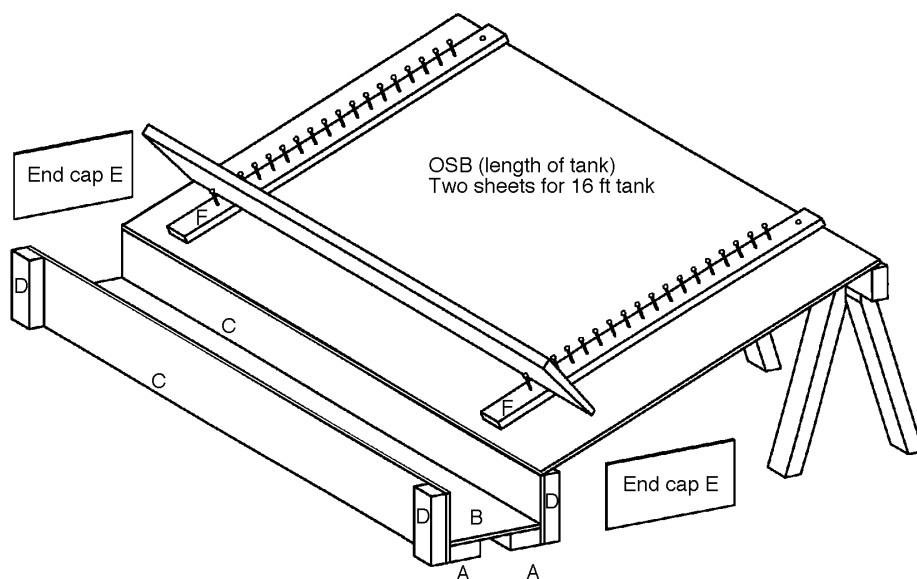


Figure 1—Dip-tank (without end caps attached) shown with first piece of siding in rack.



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Remove the piece and place it in the drip rack so that it leans toward the tank with its edge touching the base of the upper nail and its side leaning against the head of the lower nail. For siding, hold the piece with the thick edge up and the saw-textured (rough) side facing away from the tank; by placing it in the drip rack this way, any nail dents will be only on the back (smooth) side. (We strongly recommend installing siding on the structure with the saw-textured side out.) For very long and flexible pieces, you may find it necessary to use every other slot of the rack to keep the pieces from touching each other.

Place the first board that was dipped in the lowest position (first position) on the rack. While the second board is soaking in the tank, move the first board to the second position. Remove the second board from the tank and place it in the first position. While the third board is soaking, shuttle the first and second boards up the rack to clear the first position. Continue the shuttling process.

By the time the drip rack is full, the first piece that was dipped can be moved to another rack on a plastic-covered driveway, leaned against a sheathed wall, or installed (possible when using clear finishes). Do not stack the pieces until they are completely dry.

## Tips

- A blue–black discoloration is caused by the reaction of wood extractives with iron. It is associated with the use of ferrous nails and iron traces from tools. Even for temporary dip tanks, it is best to use galvanized screws to construct the tank and drip rack.
- If you are using waterborne finishes, reaction with iron is more likely to be a problem. In this case, be sure to use double-dipped galvanized or stainless steel fasteners for the drip rack.
- Professionals may wish to make a more permanent reusable tank by taking greater care with construction. Thoroughly caulking the joints and finishing the surfaces of the tank may alleviate the need to carefully line the tank with plastic each time it is used. For this application, use only high-quality galvanized or stainless steel fasteners for the tank.
- Cutting pieces to size before dipping alleviates the need to treat the cut ends in a separate procedure.

## Safety Precautions

- Protect your hands with gloves, wear safety glasses, and take care to avoid fire.
- Many solvent-borne finishes are quite flammable; rags and other material contaminated with the finish can spontaneously combust if not disposed of properly. Seal contaminated material in a metal container or soak in water.
- If the finish contains a pesticide, contaminated material may be considered hazardous waste. Consult the manufacturer to determine proper disposal for waste materials.

For more information, see *Finishes for Exterior Wood*, Forest Products Society, 2801 Marshall Ct., Madison, WI 53705–2295. (608) 231–1361. \$19.95

<http://www.fpl.fs.fed.us/> See FAQ

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March 2001