Read labels of all products completely. Nothing listed here is meant to replace manufacturers' directions!

Consolidant. A clear penetrating epoxy to harden wood. Treats wood, exposed after rot, to make it a good surface for wood putty epoxy to adhere to. Brand: Industrial Formulators, Inc. Product name: S1 Sealer®, part A and B. Metal cans in quart and gallon sizes. The quart size should be plenty. Along with this you will need quart-size plastic containers with tight-fitting lids (to measure and mix and cure the stuff), as well as cheapo disposable brushes (don't even try to save a brush after having used it with this stuff), and VERY IMPORTANT latex or nitrile gloves. Just get a box of 100! Also get a few disposable face masks and 2" wide blue masking tape.

Make sure that any surfaces you do not wish to treat are masked. Go ahead and get the expensive 2" wide blue masking tape (3M product). It sticks well yet is easy to remove (if not left in place more than a few days). It's expensive but it is worthwhile. Cheaper stuff either lets the consolidant soak through or will disintegrate and require much more time to remove tiny little slivers at-a-time.

The wood putty epoxy (Sculpwood). Putty that is moldable, and after setting up can be sawed, sanded, drilled, painted like wood. Preferable over a product like Bondo® which is designed for metal car body repair. It expands and contracts like metal, unlike wood putty epoxy which expands and contracts like wood.

Brand: SystemThree. Product name: Sculpwood®.

Several sizes available. Again, disposable gloves a must (some included in box). Simply take equal amounts from tubs (2) and mix by hand and apply. Slightly more than the original form so it can be sanded down to match original appearance after curing (12 hours at least).

The consolidant will fully cure overnight, but it is perfectly Okay to apply it early in the morning (when no rain is expected and after dew has evaporated) and then apply the wood putty epoxy while the substrate/consolidant is still tacky, in the afternoon.

All this is (unless they changed it on me in the past few weeks) available at Fisheries Supply, located across the street from Gas Works Park at: 1900 N. Northlake Way #10. Seattle, WA 98103-9093.

http://www.fisheriessupply.com/department/home.aspx

So:

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Step 1:

Measure consolidant (equal parts A and Hardner) into measuring container (estimate how much you will need based on size of area to be repaired). Tightly cover with lid. Shake to mix well and let sit for at least one hour. Up to 12 hours working time.

Step 2:

Remove ALL rotten wood. Scrape the exposed good wood to roughen the surface.

Step 3:

Mask all areas adjacent to the area to be repaired with masking tape. Apply at least two 2" strips on the brick below the sill (if applicable). Press masking tape securely onto brick and mortar. The consolidant is almost impossible to remove from brick without damage. Avoid spilling.

Step 4:

Apply consolidant to exposed wood with brush (follow all safety precautions on label). Keep surface wet for at least 10 minutes. Let cure.

Step 5:

After curing (either complete overnight or until still somewhat tacky (about 8 hours)), mix wood putty epoxy according to manufacturers guidelines.

Step 6:

Slightly over-fill treated area. Just use your hands to push the materials into roughly the correct shape. You can use small strips of wood (or cardboard) to create straight lines for corners. Don't overdo it trying to make it perfect. That's what sanding is for..... Let cure overnight.

Step 7: Remove masking tape.

Step 8: Wear a face mask! Chisel (large blobs) and sand (smaller amounts) of wood putty down to desired shape. Hand-held 80-grit sanding belt works well for rough shaping (easy to hold and efficient in removing material; fresh band with corners works well to get into tight corners). Finish with 100 or 120 grit sanding paper.

Step 9:

Apply one thin coat of oil-based primer.

If there are still some minor ($< \frac{1}{4}$ ") scratches, dents etc, fill them in with painters' putty and sand between first and second coat of primer.

Oil-based simply sticks better than latex-based. You can finish with one or two coats of either oil-based or latex paint on top of the primer. If you use a latex-based primer it doesn't stick very well and you cannot use an oil-based finish paint.

Step 10: Step back and admire your work.