build right

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Treating cut ends of timber

When preservative-treated timber is cut, shaped, planed or drilled, the newly revealed timber may not be protected by preservative and end grain may be exposed. Additional treatment may be needed to protect the cut ends.

imber can be a very absorbent material, particularly through the end grain, which can soak up moisture at a rate up to 100 times greater than through the face. Naturally durable timber species suffer little from this, apart from the dimensional changes they undergo as they take up and release moisture. Less-durable species will need some form of preservative treatment if they are to remain durable.

Any cutting of timber (whether from sawing, shaping, planing or drilling) has the potential to expose the end grain and allow the uptake of



The end grain soaks up more moisture than the face.

moisture. In addition, any preservative treatment in these areas may have been compromised because of limited penetration of the preservative. Depending on durability requirements this newly exposed timber may need to be painted, treated with a preservative, or both.

Treat first, seal after

Some manufacturers of timber preservatives recommend treating any exposed timber by brushing on preservative. But applying an appropriate preservative to the exposed surface, while enhancing



BRANZ recommends two coats of sealer to the cut ends.

durability, will do little to prevent the uptake of moisture. If moisture gets in it can cause the finish coatings to fail by destroying the coating adhesion.

The durability of applied finishes is therefore improved if the end grain of the timber is also sealed before installation. This is particularly pertinent when dealing with timber species that are naturally absorptive, e.g. western red cedar and radiata pine. Western red cedar is particularly likely to have unsightly marks show up under transparent finishes as a result of the movement of water-soluble chemicals within the timber.

To maximise timber and finishcoating durability, a two-stage process is necessary. First, a brush application of preservative to the revealed timber, followed by a separate sealer coat to the end grain.

For the sealer, BRANZ recommends at least two applications of a film-forming product (where a stain or clear finish is specified) or two coats of primer (where a paint finish is specified).