



Tips & Techniques Bulletin

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Parging Insulated Concrete Form (ICF) Foundations

Condition:

The exposed exterior wall area found between grade and siding of an ICF block foundation or an ICF starter brick ledge is considered unfinished until properly parged. Since there are many different types of ICF blocks on the market using expanded polystyrene foam (EPS), along with utilizing different plastic locking mechanisms, to achieve best results it is recommended that one unified method for parging be used.

Factor:

Finishing the ICF foundation area whether it is a few inches or several feet because of a walk-out with a parge that adheres well to EPS offers an inexpensive option to complete this exterior wall foundation area. Since the area above grade does not need to be covered with a waterproofing membrane, applying a parge with a fibreglass mesh protects the wall area from back-fill or landscaping damage, rodent or insect infestation and offers a more desirable finish.

Technique:

Remember you can apply Finalcrete on to a damp surface and this is especially true during hot conditions. See bulletin on extending pot life in hot conditions for more information. On a typical ICF foundation wall these few steps listed below will make the trowel parging job go smoothly.

1. Clean off the surface area with a broom, air blower or easy pressure wash.
2. Use spray foam to fill in cracks found on the wall, let cure and cut off excess.
3. Once repair foam is cured, apply first overlay coat at approx 1/8" (3.2 mm) thick.
4. Hang and/or embed fibreglass *mesh into wet parge before it sets or dries.
5. Apply second coat at approx. 1/16" to 1/8" (1.6 - 3.2 mm) overlaying the mesh.
6. Finish as preferred, smooth float, knock-down, stucco, etc., hiding mesh pattern
7. Protect from direct sunlight and/or lightly mist to assist curing.

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Tips:

ICF substrate must be clean and free of cracks or loose dirt and other material.

Two methods for attaching *mesh, First Method (a) hang mesh from corners over initial parge and apply second coat to cover. Second Method (b) embed mesh into initial coat before it sets and then apply second coat to cover.

Coverage of a single two-part kit of Finalcrete is about 40 sqft at 1/8" (3.2 mm) thickness

For best results, do not apply Finalcrete in direct sunlight at temperatures exceeding 30°C (86°F) and protect from winds exceeding 25 km/hr (15 mph) as well as heavy precipitation for at least 24 hours.

If any seam, crack or hole is larger than 1/16" (1.6 mm) then the seam must either be sealed using spray foam or trowel Finalcrete into the seam with a thin mesh tape applied over the seam covering it completely.

If spray foam is used to fill cracks, holes or seams it must be dry and fully cured before Finalcrete is applied.

Excess foam used in cracks must be cut flush with the ICF. Use recommended foam from ICF manufacturer where specified otherwise generic expanding foam if not specified.

Rasp mounds, bumps and UV degraded foam to ensure best adhesion of Finalcrete.

Surface and ambient temperatures must be at least 10°C or about (50°F) a minimum of 24 hours, and must remain so until Finalcrete has cured.

Ensure ICF area is completely covered with Finalcrete from overlapping waterproofing membrane to upper finish siding area.

Overlap mesh joints a minimum of 2.5 inches (65mm). It is recommended to double mesh inside corners, outside corners, corners of openings and all cracks or holes. Always apply additional coats until the mesh pattern is not visible on finish surface.

Finalcrete can be trowel-applied with a stainless-steel trowel, or spray-applied, see spraying instructions found under product documentation at Finalcrete.com.

These tips and techniques for improving workability for ICF parge applications should help with your foundation finishing projects.