READY TO INSPECT — FIELD CHECKLIST

Shotcrete rough-in inspection checklist

Shotcrete rough-in is the last time the work is fully visible. Once the cover inspection passes and the walls, ceilings and slabs close, every defect left behind becomes a demolition bill. This checklist walks the rough-in in the order the work goes in, with the photo each item needs before it gets buried. Work is commonly verified against ACI, the applicable building code. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The GC's superintendent with the shotcrete foreman, releasing the wall or slope before the nozzle crew starts.
When: After reinforcement and embeds are placed and screeds or ground wires are set, before the first pass covers any of it.

Substrate and reinforcement

- [ ] Substrate prepared and reinforcement placed to allow encasement
  Substrate clean and sound, bars held off the face with clearance for the material to shoot behind and fully encase them, splices and laps in place.
  2 photos required
- [ ] Cover maintained over the reinforcement
  Cover to the finished face confirmed at the bars and at chairs or standoffs, so the design cover isn't lost when the surface is cut to grade.
  2 photos required
- [ ] Bar spacing and laps leave a clear path for the stream
  Bars not bundled or stacked tight, laps spaced or arranged as the approved drawings allow, so no shadow forms behind a bar where the stream can't reach.
  1 photo required
- [ ] Reinforcement tied rigid so it won't vibrate under the nozzle
  Mat struck by hand stays still; loose bars re-tied and anchored to the substrate so they don't shake, slough the material or open voids behind them.
  1 photo required
- [ ] Substrate wetted to a damp surface with no standing water
  Concrete, masonry or rock face wet down ahead of shooting and blown free of puddles, or earth face trimmed and moist, so the first layer isn't dried out.
  1 photo required

Embeds and thickness controls

- [ ] Embeds and blockouts set and protected
  Anchors, sleeves and blockouts placed to layout and masked or protected so they aren't buried or fouled by rebound.
  2 photos required
- [ ] Ground wires or depth screeds set for thickness
  Depth gauges, ground wires or screeds set across the surface so the crew can shoot and cut to the specified thickness.
  2 photos required
- [ ] Stopping points and joint tapers planned with the foreman
  Where each shift will stop is agreed, with the edge shot to a taper rather than a square butt unless the approved drawings show a formed joint.
  No photo required
- [ ] Adjacent work masked against rebound and overspray
  Finished walls, windows, equipment and the toe of the wall covered or masked so rebound and overspray don't bond to them.
  1 photo required

Mix and nozzle qualification

- [ ] Test panels shot and nozzle operators qualified
  Preconstruction test panels shot in the same orientation and mix, cores or cut sections reviewed for density and encasement before production shooting.
  2 photos required

- [ ] Each nozzle operator on the crew named on the qualification record
  Qualification record on file for every nozzle operator shooting today, matching the process (wet or dry) and orientation of this work.
  No photo required

- [ ] Shotcrete mix submittal approved for the process in use
  Approved mix design matches wet- or dry-mix process, aggregate size and any fibers or admixtures, on file before the first delivery.
  No photo required

- [ ] First batch ticket or bag label matches the approved mix
  Ticket or bag label photographed and compared to the approved mix before the first load goes in the pump or gun.
  1 photo required

- [ ] Production test panels scheduled with the testing agency
  Panel forms on site and the testing agency booked for production panels at the frequency the specifications set, with the special inspector present where the statement requires.
  No photo required