

QC Hydraulic Cement Underlayment Checklist

Section 03.54.16

<p>Concrete substrate surfaces exhibit an ICRI CSP 3–5 profile with no laitance, curing compounds, sealers, oil, or debris immediately prior to primer application.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Concrete substrate relative humidity, moisture vapor emission rate, and pH readings are within manufacturer limits (e.g., ≤75 % RH or ≤5 lb/1000 sf/24 h and pH ≤10) before placement of underlayment.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> FTQ ✓ OPN NA 📷 ☰ </div>
<p>Manufacturer-approved primer is uniformly rolled or sprayed at specified coverage rate and allowed to reach the required tack-dry condition before underlayment placement.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> FTQ QC ✓ NA 📷 ☰ </div>
<p>Perimeter isolation strips or compressible foam are installed at walls, columns, and penetrations to prevent bonding and accommodate movement.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Mix water volume, temperature, and mixing time conform to manufacturer instructions for each batch; water-to-powder ratio recorded on QC log.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Mixed underlayment is placed within manufacturer's working time window without re-tempering or addition of water at the pump or bucket.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Installed underlayment thickness meets project requirements: minimum 1/4 in (6 mm) and does not exceed manufacturer's single-lift maximum unless approved reinforcement is provided; spot measurements taken and documented.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> FTQ QC ✓ NA 📷 ☰ </div>
<p>Galvanized metal lath, fiberglass mesh, or manufacturer-approved reinforcement is securely anchored over wood, gypsum, or weak substrates and at feather-edge transitions where required.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Ambient and substrate temperatures during placement remain within 50 °F–90 °F (10 °C–32 °C) and are maintained for minimum 24 h after pour; no direct airflow causing rapid surface drying present.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Fresh underlayment is protected from foot traffic, wheeled loads, vibration, and water exposure until achieving initial set and manufacturer-specified walk-on strength.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Finished surface flatness meets specified tolerance (e.g., 1/8 in in 10 ft or FF 35) verified by straightedge or digital flatness meter at representative locations.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> FTQ ✓ OPN NA 📷 ☰ </div>
<p>Control joints or saw cuts are extended through underlayment directly above substrate joints or at manufacturer-recommended spacing within 6 h of placement.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> FTQ ✓ OPN NA 📷 ☰ </div>
<p>Penetrations, floor drains, and sleeve openings are sealed prior to pour to prevent leakage of self-leveling material beneath substrate or into occupied spaces.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> FTQ ✓ OPN NA 📷 ☰ </div>
<p>Underlayment compressive strength test cylinders/cores meet or exceed specified minimum (e.g., 4000 psi at 28 days); field test results are logged and reviewed.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>
<p>Cured underlayment surface is free of cracks, debonded areas, ridges, or voids; any defects are cut out and patched with manufacturer-approved material before flooring installation.</p> <p>Observations</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> ✓ QC OPN NA 📷 ☰ </div>