CTU Online Anytime Module 3.5 – Grout Installation Tips

Key Takeaways

- Always create a mock up to test grout on the materials before an installation
    - It is important to understand the tile and stone materials being used
    - Check tiles for things like micro-textures, nano-coatings, absorption properties and surface finish
- There are products available to work around any of the challenges stated above
    - Aqua Mix® Grout Release can be used to combat the challenge of micro-textures and pores in polished porcelain or textured surfaces like wood-look planks
        - A film is created on the surface to keep grout from getting into textures and pores
- The number one contributor to grout job failure is over-watering – measure carefully
- The number two contributor to grout job failure is over-washing – less is more
- Cement grout tips:
    - Always mix with clean tools (mixing paddle or trowel and bucket)
    - Always measure the water according to directions (and make sure it is clean)
    - Pre-blend multiple bags of dry powder
    - Never mix with a high speed drill (always mix with low speed or by hand for small batches)
    - Allow grout to slake after mixing
    - Never add water after slaking (this is called re-tempering and can discolor and weaken grout)
    - Stir grout before using
- Grout float selection is critical to success of the installation
    - Stone tile will require softer grout float
    - Epoxy grout will require a resin resistant, rigid float
- Grout should always be applied diagonally across joints to keep them full
- Cement grout set up time varies based on the temperature and relative humidity on the job
    - Check product Technical Data Sheets for information on set time
- Cement grout is ready to be cleaned when:
    - Grout is stiff to the touch
    - Grout does not transfer to fingers when touched
- Less water is better when cleaning grout. Too much water can:
    - Weaken grout
    - Change grout color
- A dry buff can be done after cleaning to remove any residue left in the tile by the sponge
- To offer the highest level of protection to both standard and high performance cement grout systems, a penetrating sealer should be applied after curing

- Epoxy grout tips
    - Apply Grout Release or pre-seal the tile to make clean up easier
    - Start with clean tools
    - No mixing water is needed
    - Do not begin mixing until ready to grout
    - In order to counteract the exothermic reaction of epoxy grout
        - Transfer mixed grout from bucket, making small piles of grout
        - This slows the reaction and lowers the temperature, providing more working time
- Cleaning epoxy grout
    - Allow time for set up (see Technical Data Sheet)
    - Test for stiffness and transfer to gloved finger
    - Use warm water, scrub pad, sponge and microfiber towel
    - Scrub grout on tile and use sponge to remove material
    - Using clean rinse water, drag a damp microfiber towel across the surface of the tile
- Single Component Grout® steps
    - Apply Grout Release or pre-seal porous, coated or textured tile to make clean up easier
    - Spread grout diagonally across the joints then remove excess grout with the float
    - Clean immediately using fresh water and a circular motion with a lightly damp grout sponge
    - Follow by making diagonal passes with a clean, lightly damp grout sponge
    - From separate bucket of water, drag microfiber towel across surface of the tile
    - Move on to next section of tile to grout
- How to handle haze leftover from grout clean up
    - Most cement grouts – use Aqua Mix® Cement Grout Haze Remover
    - Single component or epoxy grout – use Aqua Mix® Non-Cement Grout Haze Remover
    - Stubborn epoxy grout haze – use Aqua Mix® Sealer and Coating Remover
- Movement joint tips
    - Fill joints with a flexible sealant, such as Custom Building Products' 100% Silicone Sealant
    - Consult TCNA Detail EJ171 for complete guidelines

<u>Bonus section: dealing with weather's effect on applying grout</u>

- Environmental conditions on the job can present challenges
    - Hot weather can affect color and shrink cement. Tips to combat the heat include:
        - Use a canopy
        - Grout early or late in the day
        - Use cold water to slow reaction time of grout
    - Cold weather can extend drying times. Some tips to combat the cold include:
        - Heat the area
        - Heat the water
            - Can use an immersible water heater if warm water not available

- Do not grout in extreme heat or when temperatures are freezing or below. Prevent epoxy or single component grouts from freezing.
- Wind should be blocked by canopy and tarps, if possible. Excessive wind can cause shrinkage cracks and color changes.
- Be sure to protect grout from other trades until cured. Caution tape can be used but take care not to put paper on top of fresh grout. Traffic from other trades is covered in ANSI A108.

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