

STUCCO TIPS

Division 09 24 23

WALL PREPARATION

Block

- Clean walls of all loose materials (cement, dirt, dust, or sand or other debris), which will inhibit bonding.
- Use a dash bond coat or a bonding agent over precast or cast-in-place concrete and all other suspect areas (such as smooth face block).

Lath

- Wet the wall evenly, to the point of runoff, before application.
- Make sure that all lath and bead are correctly fastened and overlapped.
- Use control joints as recommended in ASTM C-1063.

MIXING

- Use clean water that meets drinking water standards.
- Mix most of your water and ½ of your sand before you add your cement to prevent lumping.
- Use a mechanical mixer and allow it to mix for 3-5 minutes after adding all the ingredients. Mixing time is what builds the workability of the mortar.

APPLICATION

- Scuffing or scratching the previous coat while still pliable will aid in bonding between coats.
- Each coat should be applied over a moist backup. It is recommended that you dampen the backup to the point of runoff before applying the next coat.
- Apply with a firm, evenly applied stroke to ensure adequate adhesion or bonding to the previous coat.
- Scuffing or scratching the previous coat will aid in bonding between coats.

CURING

- Fog the walls at completion to ensure the mortar will achieve maximum strength.
- Weather conditions (wind, temperature, humidity or other inclement conditions) may affect the number of times a wall should be fogged.
- Allow ample curing time (recommended minimum 7 days) before applying paint.

Following these simple guidelines will help you to prevent the majority of the most common problems encountered by stucco contractors today. These guidelines are not intended to be, nor are they complete, detailed instructions. We recommend that Stucco only be installed by a professional applicator. Please see ASTM C-926 for more information.



For further information please contact In-Spex, LLC at (407) 588-2561 or mstarks@in-spexllc.com.



TROUBLESHOOTING STUCCO

CONDITION	MOST LIKELY CAUSES	SUGGESTIONS
Cement floats on mix water.	Cement is hydrophobic.	Mix 1/2 of the sand with most of the water before adding cement and mix longer.
Mortar is frothy in the mixer.	Water is too cold, there is too much water or mixed overly long.	Use warmer water, reduce the amount of water and/or air-entraining admixture.
Stucco stiffens too quickly after applying to a masonry base.	Base is too dry.	Wet the wall evenly before application.
Stucco falls off metal lath when applied.	Lath hung upside down. Too much water in the mix.	Reposition lath correctly. Reduce the amount of water in the mix.
Scratch coat is cracked over each stud.	Uneven plaster thickness.	Reapply lath correctly and apply a brown coat.
Scratch coat shows efflorescence after a week of exposure.	Cold weather and/or too much time between coats.	Wet the wall evenly before application. Use a brown coat. Warm the water and sand if below 40F.
Blistering of finish coat.	Overworked or overtrowelled surface. Mix is too rich (not enough sand).	Reduce trowelling and adjust the mix.
Final coat blotchy or uneven color.	Water splashed onto surface while finishing. Batches mixed with different amounts of water.	Wet the wall evenly between coats. Fog the wall at completion.
Lack of bond to concrete and masonry.	Base is too dry. Little hydration of cement has occurred.	Wet the wall evenly between coats. Fog the wall at completion.
Lack of bond to concrete and smooth masonry.	Surface is too smooth or too dense to absorb cement paste.	Use open or rough surface masonry units. Use bonding agent or metal lath.
Lack of bond to concrete and masonry.	Surface covered with cement dust, dirt or other foreign material.	Clean walls of contaminants or use lath.
Lack of bond to concrete and masonry.	Brown coat not applied with enough pressure to form mechanical key or bond; or applied with slicker.	Use trowel for brown coat and apply pressure to force stucco into pores in masonry.
Stucco cracks in a crazed manor.	Brown coat much harder than the scratch coat or finish coat harder than the base coat. Float finish overworked and/or dried out too	Add more sand to the brown coat or use identical mixes for brown and scratch. Use lower strength finish coat.
Vertical and horizontal cracks at lath laps.	Backed lath incorrectly lapped.	Lap lath paper to paper and metal to metal.
Cracking	Poor consolidation.	Use a firm, evenly applied stroke. Correct rodding and floating procedures.
Cracking	Not enough or improperly installed control joints.	Check location and properly install control joints.
Cracking	Moisture lost too quickly.	Wet the wall evenly before application.