

**DESIGN NOTE** 

# **Protecting Masonry Materials and Walls During Construction**



To assure best results when building with architectural masonry, taking a few simple steps at the jobsite to protect the masonry materials and walls under construction will help deliver great results while reducing overall construction expense.

#### Handling Materials on the Job Site



Units should be stored on pallets, and not directly on the ground. They should be adequately covered to prevent water absorption or staining from mud or other materials on the site.

Staging deliveries so that masonry materials are not left unused on the jobsite for prolonged periods can also be helpful in avoiding discoloration or staining due to site conditions or prolonged weathering on the pallet.

Once the units are removed from covered storage, they should be handled so that they are not exposed to water or soil. The wall under construction should be protected from mud splatters or other conditions that could result in staining.

#### **QUICK POINTS**

• Protect stored masonry materials on the site to protect them from staining or discoloration.

• Cover uncapped walls or columns or other exposed details during construction to avoid water penetration and consequent efflorescence.

• Remove mortar and grout stains and droppings from the wall during construction to minimize cleaning requirements.

• Clean the finished walls promptly after construction using the gentlest cleaning methods possible and test the methods first before applying to the walls.

## **Avoid Water Penetration in the Walls During Construction**

At the end of the workday, and after completing each segment of the masonry wall, the top surface of the masonry must be protected to prevent water penetration. Use a plastic tarp to cover the unfinished masonry work to protect it from the weather. Cap the walls as soon as possible after building them. Uncovered masonry walls are vulnerable to large quantities of water entering the wall during rainstorms, which can lead to the formation of efflorescence – especially if the wall does not have a proper flashing and weep system installed. This advice also applies to uncapped columns or other details.



Making a practice of removing mortar and grout spillage from the masonry wall as it is built will minimize overall cleaning requirements. Clean the wall promptly after the units are laid (typically within four to seven days of building the wall) so that mortar and grout stains do not have a chance to fully harden. This will allow the use of the gentlest cleaning techniques, which will in turn minimize the risk of the cleaning process causing damage to the architectural masonry. In many cases, simply cleaning with water and a non-metallic brush can yield good results if performed

promptly.

The use of water during cleaning to remove surface accumulations should be handled carefully since it may cause additional water to enter the wall. Pressure washing settings should be tested first to avoid risk damaging the wall. Complete caulking of any joints or interfaces with windows or openings before using water to clean.

Acidic masonry cleaners, unless applied correctly, can damage architectural masonry by etching the surface, changing the surface texture or leaving stains. Be sure to follow the cleaning product's instructions, which generally will require thoroughly pre-soaking the wall with water before application, and then following application by thoroughly rinsing the wall to remove the cleaner as completely as possible.

Any cleaning means and methods should always be demonstrated first for acceptance, preferably on the sample panel, prior to use on the main building walls to demonstrate good results. The sample panel will then be the standard for acceptance of the final cleaning results.

### Conclusion

Each of the steps described in this note can easily be incorporated into a jobsite routine, and will result in greater efficiency, less expense, and superior results.



#### **Questions?**

For more information, visit concreteproductsgroup.com or email your questions to info@concreteproductsgroup.com