MICROBIAL CONTROL PROGRAM

Due to the recent developments in microbial contamination, environmental liability, and public awareness, Rowan University is taking steps to insure that their construction projects are performed in a manner that will reduce the likelihood of microbial issues, both during and following construction. Contractors are required to submit work plans for microbial control during the design process. These work plans shall take into account the specific nature of the construction project. At a minimum, the following requirements shall be included. This should not be considered an all-inclusive specification, but merely the minimum requirements that must be followed. It is anticipated that the individual experience and expertise of the design engineers, the construction managers, and the construction contractors will allow a site-specific plan that will be both cost effective and feasible.

I  Material Orders/Shipping

Porous material must be ordered to reduce the amount of time between receipt and installation. Staging areas must be selected to insure that materials remain free of moisture and damage prior to installation.

II  Material acceptance

The distributor should be informed prior to shipment that material shall be inspected at the jobsite. Material must be delivered in a clean and dry condition. Material with signs of damage, water stains, moisture, or microbial growth will be refused and suitable replacement material shall be delivered at the distributor’s cost.

This inspection shall consist of visual observation of every pallet and moisture level monitoring of random pieces.

III  Project Progression

No porous material shall be installed on any floor until the floor is fully protected from the elements. The building envelope should be sealed and shaft ways should be protected to prevent water intrusion. If shaft ways must be covered with porous material, the material should be protected by an impermeable barrier at the time of installation. This barrier may include fungal resistant encapsulant and caulk. The shaft shall be designed with a sump and an operable pump prior to installation of material. Whenever possible, moisture resistant material should be utilized. If the potential of moisture intrusion cannot be eliminated from the porous material, the shaft shall be designed with a vapor barrier separating the porous material form the building’s interior.

Once porous material has been introduced to a construction floor, the environment should be tempered with the buildings HVAC system or temporary heating and/or dehumidification units.

As soon as practical, porous material should be coated with a penetrating coating (primer) and latex paint or similar.

Housekeeping should be enforced stringently on floors with porous material. The daily removal of excessive dust and debris will reduce the likelihood of extensive damage in the event of moisture intrusion.

The following techniques should be employed when complete sealing is not attainable:
1. Install bulkheads at all mechanical and elevator shaft openings
2. Install sheds at stair towers
3. Furnish and install a ramp at each shed that extends up and down through the doorway, to control any water that might accumulate near the stairwell, and to act as a “dam” to prevent water from running down the stair well
4. Cover all openings with wood or concrete curbing, plywood, and membrane roofing
5. A spray-applied membrane will be installed at the tenant areas of the floor. The intent is to let the water puddle on this membrane, so that the contractor can “squeegee” the standing water into the drains as necessary.

IV Project Inspection

Daily inspections shall be conducted on each floor that has porous material either stored or installed. This inspection shall include visual inspection of the building materials, random moisture content readings of the porous materials, and inspection of the environmental control equipment (heaters/dehumidifiers). The inspector shall also identify signs of water intrusion or spills. Immediate response to moisture is key to the success of microbial control.

V Contamination Control

Although the above steps will reduce the likelihood of microbial amplification and limit the severity should amplification occur, steps should be taken to address defects in the material as it arises. A limited amount of material should be available to replace damaged items.

Water intrusion, either through the building envelope or inadvertent spills/releases, should be cleaned up immediately. If the moisture is removed within 24 hours, the probability of microbial growth will be limited. Porous materials that become saturated should be removed and replaced regardless of visible growth.