THE NATIONAL TERRAZZO & MOSAIC ASSOCIATION

Job Hazard Analysis (JHA)

Activity/Work Task:	Overall Risk Assessment Code (RAC) (Use highest code)					**L**
Project Location:	**Risk Assessment Code (RAC) Matrix**					
Contract Number:	**Severity**	**Probability**				
Transmittal Number:						
Date Prepared:		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title):	Catastrophic	**E**	**E**	**H**	**H**	**M**
	Critical	**E**	**H**	**H**	**M**	**L**
Competent Person:	Marginal	**H**	**M**	**M**	**L**	**L**
	Negligible	**M**	**L**	**L**	**L**	**L**
Notes:	Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)					
	"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.	**RAC Chart**				
	"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible	**E = Extremely High Risk**				
		H = High Risk				
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	**M = Moderate Risk**				
		L = Low Risk				

Principal/Job Steps	Hazards	Controls	RAC
Delivery/Removal of Equipment and Materials	**1.** Struck-by/Caught Between	**1a.** wear proper personal protective equipment including gloves, safety glasses, hard hats, safety-toed boots and proper construction attire **1b.** Use only certified lift truck operators **1c.** Barricade loading area **1d**. Material will be moved from the lay down area on pallets with an inspected pallet jack. Service elevator will be used.	**L**

	2. Muscle Strain	**1e**. Spotter in front and behind while moving pallet **2a.** Utilize proper material handling procedures including using proper lifting techniques **2b.** Employ the buddy system to ensure that no man takes on too much weight individually	
Shotblasting/Substrate Prep/Edge Grinding	**1.** Electrical **2.** Slip/Trip **3.** Noise **4.** Eye and face injury **5.** Hearing	**1.** Inspect cords and equipment daily **2a.** Utilize proper housekeeping initiatives **2b.** Use magnet to remove any steel shot from floor **3.** Wear ear protection such as plugs. Use double protection if deemed appropriate **4.** Wear protective goggles **5.** Wear hearing protection during shot blasting	**L**
Substrate crack repairs/membrane installation	**1.** Skin Contact/ Chemical Hazard **2.** Electrical	**1a.** Wear chemical goggles **1b.** Wear impervious gloves **1c.** Retain all applicable SDSs onsite **1d.** Wear appropriate clothing including pants with no cuffs **2.** Inspect cords and mixing drills daily	**L**
Metal divider strip/control joint installation	**1.** Hand Injury **2.** Eye Injury	**1.** Wear appropriate gloves when cutting strips and using adhesive **2.** Wear protective safety glasses when cutting strips	**L**
Mixing Epoxy	**1.** Skin Contact/Chemical Hazard **2.** Muscle Strain **3.** Respiratory **4.** Wet method must be utilized as using the dry method could trip the sprinkler system.	**1a.** Wear chemical goggles **1b.** Wear impervious gloves **1c.** Wear appropriate clothing including long sleeved-shirts and pants with no cuffs **1d.** Retain all applicable SDSs onsite **2.** Use proper lifting techniques and material handling procedures **3.** Mix Chips off site. Bring in barrels. **4.** Wear Goggles while mixing.	**L**
Placing/Troweling Epoxy	**1.** Skin Contact/ Chemical Hazard **2.** Disposal **3.** Cleaning	**1a.** Move aside while epoxy is poured onto the floor **1b.** Wear impervious gloves **1c.** Retain all applicable SDSs onsite near work zone **1d.** Wear protective safety glasses **1e.** Eye wash stations are available for use on both mezzanine and basement levels. Workers need to have access within 10 seconds/15 minute flush **1f.** Barricade work areas by using caution tape **2.** Wrap in poly duct tape and close and dispose **3.** Use denatured alcohol and wipe the tools	**L**
Grinding/Polishing Terrazzo	**1.** Electrical	**1a.** Inspect cords and equipment daily	**L**

	2. Struck-by/Caught Between **3.** Slip/Trip **4.** Respiratory **5.** Eye and face injury	**1b.** Tag **"Damaged-Do Not Use"** any damaged cords or equipment and remove from service **2.**Barricade work areas by using caution tape **3a.** Utilize proper housekeeping initiatives **3b.** Contain and remove slurry with squeegees and vacuums **3c.** Ensure cords/equipment/materials do not block walkways or egress points **4a.** Utilize dust control and containment protocols. Use of vacuums hooked to machines. Water when necessary **4b.** When deemed necessary by the Qualified competent person, utilize wet grinding methods **4c.** Utilize dust mask. See attached silica testing **5.** Wear protective safety glasses and/or face shield	
General Hazards **All Activities Require the Utilization of Proper Housekeeping Initiatives**	**1.** Falling Items **2.** Back Injuries **3.** Excessive Noise **4.** Heat exhaustion or heat stroke **5.** Severe Weather **6.** Miscellaneous Construction Site Hazards	**1.** 100% Hard Hat Usage **2.** Bending at the knees, use two people **3a.** Do not start equipment before job start time **3b.** Utilize hearing protection while machines are running **4.** Know the symptoms of heat-related illness, consume extra fluids and take breaks if needed **5.**Follow GC/CM Severe Weather Plan and, if needed, Evacuation Plan **6a.** 100% eye protection (ie: safety glasses, goggles, face shield) **6b.** Ankle covering safety-toed boots **6c.** Shirts with sleeves, short or long, covering complete torso area **6d.** Long pants **6e.** Class 2 Vest	**L**

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements	
Shotblaster	Train employees on proper use of GFCI prior to starting work.	Inspect and test cords daily and GFCI	
Mixer	Train employees on proper use of GFCI prior to starting work.	Inspect and test cords daily and GFCI	
3100 Machine	Train employees on proper use of GFCI prior to starting work.	Inspect and test cords daily and GFCI	
2100 Machine	Train employees on proper use of GFCI prior to starting work.	Inspect and test cords daily and GFCI	
Buffer	Train employees on proper use of GFCI prior to starting work.	Inspect and test cords daily and GFCI	
Hand Polisher	Train employees on proper use of GFCI prior to starting work.	Inspect and test cords daily and GFCI	