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OPERATION, SAFETY & PROCEDURE GUIDELINE MANUAL

FOR

RUB-R-WALL PLUS® WATERPROOFING

as manufactured by

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OPERATION, SAFETY & PROCEDURE GUIDELINE MANUAL FOR

RUB-R-WALL®1 PLUS WATERPROOFING

IMPORTANT INFORMATION

Once applied and cured, Rub-R-Wall Plus Waterproofing is 100% rubber polymer, solvent-free, non-toxic and non-carcinogenic. That makes it tougher, stronger, and safer than competing asphalt-based products. The Rub-R-Wall Plus membrane meets Federal, State and many Local VOC emission requirements.

Prior to application, in its liquid, uncured form, Rub-R-Wall Plus contains solvents that are **flammable and hazardous**. Because of this, Rub-R-Wall Plus should only be used in well-ventilated areas in compliance with all applicable regulations from federal, state and local authorities. Rub-R-Wall Plus should **never be used in confined spaces** or areas where ventilation is poor. Rub-R-Wall Plus is safe when applied and stored in accordance with this Manual and applicable law. If Rub-R-Wall Plus is used or stored in a poorly ventilated area or any other location where vapors may accumulate, the flammable vapors can create a potentially explosive environment. **Rub-R-Wall Plus must also not be used around open flame or other ignition sources due to these flammable vapors.** The applicator should confer with the general contractor's representative on site to inform him/her of the flammable nature of the product and to instruct the representative to ensure there are no ignition sources introduced to the area of application for 24 hours.

Please read this Manual in its entirety and the Safety Data Sheet ("SDS") which accompanies the product before transporting, storing, or applying Rub-R-Wall Plus Waterproofing. Further, please review and ensure you fully understand all literature which accompanies your application equipment.

Note: The information presented here by Rubber Polymer Company, LLC ("RPC") should not supplant individual training, responsibility, or judgment. Anyone using this product must be trained either directly by RPC or by a Rub-R-Wall certified applicator. Please read this Manual completely and ensure you understand everything in it. If you have any questions as to the proper and safe methods to transport, store, and apply Rub-R-Wall Plus, please call RPC directly at 770-410-1545.

A Spanish version of this Manual is available upon request.

Rub-R-Wall is a registered trademark and is being used herein with express permission pursuant to a licensing agreement with the trademark holder.

SECTION 1: SAFETY INFORMATION

The safety of Rub-R-Wall Applicators is paramount to RPC. Rub-R-Wall Plus is safe when applied and handled properly, but vapors from the solvents in Rub-R-Wall Plus are flammable, which can cause injury if Rub-R-Wall Plus is not handled properly. Please review these safety guidelines, as well as the SDS that accompanies the product, and the manufacturer's instructions for the equipment used in storing and/or applying Rub-R-Wall Plus. DO NOT spray Rub-R-Wall® Plus Waterproofing before reading and understanding the following safety guidelines, the Rub-R-Wall Plus SDS, and all instructions which accompanied your spraying equipment. If you need additional copies of the SDS, please contact RPC and we will forward more immediately, or obtain off the website at www.rpcinfo.com. You can also find copies affixed to each barrel of material shipped to you.

- 1. DO NOT spray Rub-R-Wall Plus Waterproofing without being adequately trained in the operation and safety of your company's application equipment. Read and understand the instructions provided by the manufacturer of the application equipment.
- 2. NEVER SPRAY ALONE.
- 3. NEVER spray indoors or in confined spaces, including, but not limited to cisterns, trenches, ditches, enclosed basements, crawl spaces, or similar areas which lack adequate ventilation. Spraying or otherwise applying Rub-R-Wall Plus Waterproofing or its related products in confined spaces can result in the buildup of flammable or explosive vapors and could result in a fire or explosion or could cause respiratory failure, causing serious injury or death. Applicators who question whether adequate ventilation exists in a potential workspace should comply with the rules and regulations promulgated by OSHA or local authorities. Regional fire and other regulatory codes may vary. It is the sole responsibility of the applicator to understand and to comply with all applicable laws, rules, and regulations.
- 4. Approved heatable tanks, if used, should be vented in accordance with the tank manufacturer's specifications and instructions. The temperature in the tank should be maintained at a level that will give 120°F to 150°F temperatures at the tip of the spray gun.
- 5. DO NOT pour Rub-R-Wall Plus into a heatable tank unless and until the entire circuit has been properly grounded; i.e., the barrel has been grounded to the tank, the tank has been grounded to the truck, and the truck has been grounded to the ground. Always ground all involved containers when pouring Rub-R-Wall Plus. This ground must be attached to link both containers. Transferring Rub-R-Wall Plus must be done in a well-ventilated area away from static, sparks, flames, or any other potential ignition sources.

- 6. DO NOT heat Rub-R-Wall Plus above 150°F and do not attempt to heat Rub-R-Wall Plus via any mechanism using an open flame. During the curing process, Rub-R-Wall Plus produces flammable vapors which can ignite if exposed to open flame or other ignition sources. Properly vent the top of the barrel by loosening the bungs. If barrel heaters are used, the barrels must be properly vented to the outdoors. This prevents the accumulation of solvent vapors in confined areas while allowing for the expansion of heated materials. Always follow the safety and operational instructions provided by the manufacturers of the barrel heaters.
- 7. Enclosed application trucks or vans must have proper ventilation or air movement to avoid accumulations of dangerous or explosive fumes or vapors.
- 8. Store and transport Rub-R-Wall Plus according to Local, State, Federal, Fire, D.O.T., OSHA, environmental, and all other applicable codes and regulations. For further information call the appropriate authority in your area. This also applies to storage, transportation, and disposal of empty Rub-R-Wall Plus barrels. All hazard precautions must be observed when handling empty containers. Empty drums are not suitable for any further use, such as trash containers, rafts, barbeque pits, shooting range targets, kilns, pontoons, furniture, cribs, fire pits, dunk tanks, or any other use.
- 9. DO NOT smoke or vape around Rub-R-Wall Plus barrels, equipment, or on application sites. Secure the job site by posting "No Smoking" signs. Keep all sources of ignition away from Rub-R-Wall Plus material and vapors. Be certain other contractors are aware of the flammability of the product and ignition sources on the job site before spraying Rub-R-Wall Plus. DO NOT spray near pilot lights or active electrical switches or devices (such as power tools, lights, fans, vacuums, soldering irons, etc.) or any other potential ignition sources.
- 10. DO NOT breathe the vapors of the product. Applicators and others subjected to fumes must wear properly fitting, NIOSH approved disposable organic vapor respirators. It is recommended that the Applicator have a respirator program and that medical approval be obtained for each person who will require a mask. Displacement of air by solvent vapors can lead to oxygen deprivation causing dizziness, unconsciousness, and/or death. High vapor concentration can overwhelm the filters in the masks. If you detect fumes or smell the product through the mask or feel lightheaded or dizzy, move to a fresh air area immediately. Make sure your mask filter cartridges are functioning properly; if not, replace them.
- 11. High pressure airless sprayers are potentially dangerous. Direct spray can penetrate skin or eyes and cause serious injury. If spray comes in contact with exposed skin or eyes such that penetration occurs, seek medical attention immediately.

- 12. Prior to commencement of spray application, properly ground truck to a copper grounding rod inserted into the ground to a depth of at least six inches. ALL VEHICLES MUST BE GROUNDED.
- 13. Wear gloves, cap, and coveralls at all times during the handling and application of the product to prevent skin contact.
- 14. Wear safety goggles with side shields. If Rub-R-Wall Plus gets into eyes, flush with clean water. Seek immediate medical attention with a copy of the SDS.
- 15. A working fire extinguisher and first aid kit must always be kept in the truck cab. Fire extinguishers should be located near all truck doors, and an extinguisher should also be accessible at the spray site.
- 16. All Rub-R-Wall Plus barrels, whether full or empty, should be stored in protected areas. Keep them away from children. These containers are hazardous when emptied as they may retain vapors and liquid.
- 17. **Before applying Rub-R-Wall Plus on the jobsite, provide a copy of the Rub-R-Wall Plus SDS to the general contractor or owner's representative**. Instruct the representative to ensure there are no sources of ignition or open flame within application area for 24 hours after the application to ensure any residual fumes do not ignite.

SECTION 2: INSTALLATION PROCEDURES (Wall Prep)

- 1. Concrete walls may be sprayed 24-48 hours after the form stripping process is complete, provided no excess water or moisture is present, such as may occur after subsequent rains, leaks, washing, etc.
- 2. The footer must be clean and free of dirt, sand, soil or any other material that would prevent full adhesion of the rubber membrane. The footer must be dry, and free of any visible water. Any water present must be removed, and the substrate dried. Rub-R-Wall Plus will not adhere to a wet foundation.
- 3. Concrete walls must be free of voids and honeycombs. If present, these areas are to be treated with Rub-R-Wall Mastic or a cementitious grout. All form ties must be removed inside and outside below the concrete surface such that the membrane will not be punctured. Minor surface defects such as tie holes may be repaired using Rub-R-Wall Mastic.
- 4. Concrete walls must be smooth and free of projections and other foreign material such as organic matter, asphalt, debris, leftover tools, building materials, nails, etc..

- 5. On parged concrete blocked walls, the cores must be filled and dry prior to application.
- 6. Brick ledges and buttress walls constructed from masonry must be capped prior to application of the membrane.
- 7. Check all penetrations to insure that they are secure and in the correct and final position.
- 8. In all possible situations, require your builder to mark the proper grade lines.
- 9. Rub-R-Wall Plus Waterproofing is not intended as a permanently exposed membrane backfill within 30 days.

Strict adherence to these wall preparation procedures will ensure the proper adhesion of the Rub-R-Wall® Plus membrane, and make the application process clean and easy. Follow these steps without exception, and you will experience fewer callbacks.

SECTION 3: INSTALLATION PROCEDURES (Spray Site)

- 1. Rub-R-Wall Plus Waterproofing is designed for new construction only. It is not intended to be used for interior application, nor should it be applied in a trench dug around the structure as this does not provide adequate ventilation and will allow for the accumulation of flammable vapors.
- 2. DO NOT apply Rub-R-Wall Plus Waterproofing over asphalt or tar based products.
- 3. DO NOT apply Rub-R-Wall Plus when the ambient temperature is below 15°F.
- 4. DO NOT apply Rub-R-Wall Plus to frozen surfaces that have not had a chance to cure. Poured concrete walls, mortar, and masonry block cores filled with concrete as well as parged surfaces must be cured before applying Rub-R-Wall Plus Waterproofing.
- 5. DO NOT introduce any material that will enhance or dilute Rub-R-Wall Plus. This will adversely affect its characteristics. DO NOT try to save money by thinning Rub-R-Wall Plus it will not work as well and all the money you thought you saved (and more) will be spent on callbacks.
- 6. GROUND THE TRUCK, barrels and all spray equipment to the ground at the jobsite. THE RIG MUST ALWAYS BE GROUNDED WHILE SPRAYING.

- 7. Post a "No Smoking" sign, and ensure no other tradesmen, visitors, contractors, interlopers, guests, or others introduce any ignition sources during your time at the jobsite. This would include, but is not limited to welding, smoking, electrical equipment, flame throwers, hair dryers, sparklers, vaping, etc. Beware electrical subcontractors the nature of their work increases the likelihood of electrical arcs that could serve as an ignition source.
- 8. Apply the waterproofing membrane using approved spraying equipment in compliance with the manufacturer's instructions. Apply the rubber polymer membrane in multiple, uniform passes such that a wet membrane thickness of 60-80 mils is obtained as determined by a standard mil gauge. A cured thickness of 30-40 mils will result. Spraying a tack coat first will help eliminate sags and runs. Spray the top of the footer 3 inches away from the wall, and when finished, double check for thin or missed areas.
- 9. Rub-R-Wall Plus membrane should be firm after 15-20 minutes.
- 10. Allow a minimum of 24 hours after coating before backfilling, but ensure backfilling is complete within 30 days as the product can degrade if exposed to sunlight.

SECTION 4: EQUIPMENT

- 1. Rub-R-Wall Plus is to be heated to a temperature range of 120-150°F (at the spray tip) for installation. The spray pump should be able to achieve an input pressure of 3000 psi for Rub-R-Wall Plus application.
- 2. Rub-R-Wall Plus must be heated through a single pass heat exchanger connected to an engine's coolant system. Rub-R-Wall Plus temperature should never exceed 150°F.
- 3. Graco 45:1 airless spray pumps are recommended (or comparable unit).
- 4. Interlinking lines between the pump, heat exchanger and the material should be not exceed 4 feet in length and should have a diameter of at least 2 inches to ensure good material flow.
- 5. A high pressure spray hose is required, with a diameter of no more than ½ inch and a length of no more than 150 feet.
- 6. Graco Silver Plus spray gun with spray tip .631 (oval opening shape) is recommended.
- 7. For optimal performance, all connections should be as tight as possible to avoid the introduction of air leaks.

For questions contact:

Rubber Polymer Company, LLC 5760 County Line Road Cumming, GA 30040 Phone: 770-410-1545

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