RECTORSEAL

A CSW Industrials Company

PRODUCT DATA SHEET

METACAULK® 1200

Caulk Grade & Spray Grade Elastomeric Firestop Sealant

Description

The Caulk, Spray and Self Leveling grades of Metacaulk 1200 are a general purpose fire rated sealants for construction joints such as top of the wall, curtain wall perimeter, expansion, control, etc. and for general construction gaps and voids. Metacaulk 1200 is a water based sealant that comes in three different grades. Metacaulk 1200 spray grade is designed for spray applications and provides a fast, economical means of installation on long joint runs. Metacaulk 1200 caulk grade is a non-sag sealant that is easy to apply from a caulk gun, troweled or brushed from the pail and Metacaulk 1200 Self-Leveling is designed to fill and seal gaps, joints, and cracks for horizontal positions and can be apply by using caulking gun or brush. It cures to an elastomeric membrane seal that is suitable where dynamic movement is expected. In the event of a fire, Metacaulk 1200 will prevent the spread of flames, smoke, hot gases and water through the joint openings. No dilution or mixing is required for use. Metacaulk 1200 can be caulked from a tube, brushed or troweled from the pail, or applied with a spray pump.

Metacaulk 1200 systems are rated for up to 3 hour conditions in accordance with ASTM E1966 (UL 2079) (Tests for Fire Resistance of Building Joint Systems), test standards. Metacaulk 1200 has been cycled 500 times, in accordance with the new ASTM E1399 standard. Also tested in accordance with ASTM E814 (UL 1479) for systems up to 4 hours. Metacaulk 1200 is protected in a wet stage as well as in a dry stage against mold growth with a combination of biocides.

Applications

Metacaulk 1200 can be used as a general purpose fire rated sealant and smoke seal for construction joints on both vertical and horizontal surfaces. Metacaulk 1200 is also an excellent fire rated acoustical sealant and can be used in areas under constant vibration or movement.

Characteristics | Features

- Sprayable, Brushable, Trowelable, or Caulkable
- Freeze-thaw capable
- Water based
- Flexible - Elastomeric
- Paintable
- VOC compliant
- Excellent smoke seal
- 3 Year shelf life

Packaging

Code	Size	Qty. per Case	Dimensions (in)	Cubic Feet
Red				
66292	20.2 oz. foil pack	12	9 x 14 x 17	0.51
66015	30 oz cartridge	12	11 x 9 x 17	0.97
66379	5 Gallon	1	13 dia x 14	1.08
66387	5 Gallon caulk grade	1	13 dia x 14	1.08
White				
66525	30 oz. cartridge	12	11 x 9 x 17	0.97
66527	5 Gallon Spray	1	13 dia x 14	1.08
66386	5 Gallon caulk grade	1	13 dia x 14	1.08
66294	20.2 oz. foil pack	12	9 x 14 x 7	0.51
Gray				
66395	5 Gallon Self Leveling	1	13 dia x 14	1.08
66293	20.2 oz. foil pack Self Leveling	12	9 x 14 x 7	0.51

Installation Data

Tightly pack with the appropriate backing material as listed in the selected tested system design. There should be no loose insulation, voids or gaps present. Apply the required coating thickness to completely cover backing material.

For instructions and system listings, refer to Intertek Building Product Directory and UL Product iQ or call RectorSeal.

For Metacaulk 1200 spray application, use recommended spray equipment. Contact Technical Service at 1-800-231-3345 for current recommendations.

For airless sprayer system cleaning, follow manufacturer's instructions for specific equipment used.

Application of Metacaulk 1200 Spray requires airless spray equipment meeting the following specifications:

Working Pressure: Min. 2500 PSI (172 Bar)

Delivery: Min. .72 U.S. gpm (2.7 l/min.)

Recommended Spray Tip Orifice: 0.013 to 0.025 in. (0.53 to 0.64 mm)

Recommended to ensure all parts, seals and contact surfaces are suitable for contact with latex emulsions.

A minimum 3/8" (9.5 mm) fluid line is required, a 1/2" (13 mm) line is preferred. Consult pump manufacturer for long hose runs or lifts to higher elevations. A reversible spray tip is recommended. Recommend to select a spray tip fan pattern to appropriate to minimize over spray. The following airless spray equipment has demonstrated suitability for application of this product.

NOTE: SPRAY EQUIPMENT CAN BE DANGEROUS! USE ONLY BY PROPERLY TRAINED PERSONNEL. FOLLOW ALL SAFETY AND OPERATION INSTRUCTIONS AND PROCEDURES.

Manufacturer Model Number & Description
Titan Tool Inc. 740ix Electric Airless Sprayer
Graco Inc. Ultra Max II 695 Electric Airless Sprayer

Testing Data

Metacaulk 1200 is classified by Underwriters Laboratories Inc. For specific test criteria, refer to UL Product iQ or call RectorSeal.

Metacaulk 1200 has been tested at positive pressure with a minimum 0.01 inches (2.5 Pa) water and in accordance with UL 2079 test standards. Metacaulk 1200 has also been tested to the time-temperature requirements of ASTM E119 (UL 263).

Tested to standards of CAN/ULC S115, S101 and S102.

Sound Transmission Class (STC) 65 - Testing performed in accordance with ASTM E90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

Systems for some applications have been tested for Class 1 W ratings per UL 1479.

Tested by a third party independent laboratory to ASTM G21 with Fungal Growth Rating results of zero.

FBC™ System Compatible indicates that this product has been tested, and is monitored on an ongoing basis, to assure its chemical compatibility with Flowguard Gold®, BlazeMaster® and Corzan® piping systems and products made with TempRite® Technology. The FBC System Compatible Logo, FBC™, FlowGuard Gold®, BlazeMaster®, Corzan® and TempRite® are trademarks of Lubrizol Advanced Materials, Inc. or its affiliates.

Inspection & Repair

RectorSeal recommends that a firestop system inspection be conducted during installation of the material in accordance with ASTM E2174 and ASTM E2393. In the event post-installation inspection and destructive sampling is necessary, RectorSeal advises repairing the damaged firestop system by replacing any material that was removed or damaged with the same product originally installed, and ensuring the assembly matches the original firestop listing. RectorSeal advises, that due to the chemical nature of firestop products and sealants, material depth should be determined by measuring the points of adhesion at the substrate bond area as sealants may decrease in size during the curing process.

Material Properties

Asbestos Fillers	None
Solvents	None
Hazardous Ingredients	None
Application	Spray, Caulking Gun or Towel
Application Temperature between	40˚F - 120˚F 4˚C - 49˚C
Color	Red, White or Gray
Cure Time	5 to 7 days (1/8" at 77˚F/25˚C)
Density	~10.5 lbs/gal
Flexible	Yes
Skin Over Time	30-45 min. (at 77˚F/25˚C)
pH Value	7 to 9

Volume Coverage:	
per 20.2 oz	36 cu. in
per 30 oz	54 cu. in
per 5 gallon pail	1155 cu. in.
VOC	<10 g/l

ASTM E84, UL 723 Tunnel Test	
Flame Spread	0
Smoke Index	0

Storage & Handling

Metacaulk 1200 should be stored in unopened container between 35˚(2˚C) and 120˚F (49˚C) to obtain a 3 year shelf life.

NOTE: Do not dilute. Do not mix. Mix slightly only if there is color separation..

Limitations

Metacaulk 1200 is not designed to be used in areas under continuous immersion or in areas which would be continuously wet. Metacaulk 1200 should not be used on hot uninsulated surfaces above 200˚F (93˚C).

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRES, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300.

PRECAUTIONARY STATEMENTS: PREVENTION: Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. **RESPONSE:** IF exposed or concerned: Call a POISON CENTER or doctor/physician. **STORAGE:** Store locked up. **DISPOSAL:** Dispose of contents/container in accordance with local regulations. **KEEP OUT OF REACH OF CHILDREN.**

For additional information, refer to Safety Data Sheet.

⚠ **WARNING**: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

Manufacturer Model Number & Description

Titan Tool Inc. 740ix Electric Airless Sprayer
For more detailed information on the above sprayer visit
https://www.titantool.com/impact-740.html

Graco Inc. Ultra Max II 695 Electric Airless Sprayer
For more detailed information on the above sprayer visit
https://www.graco.com/us/en/contractor/product/17e577-ultra-max-ii-695.html

METACAULK 1200 COVERAGE RATE:

NOTE: Coverage rates as given are mathematical calculations. Allow for application losses, opening size variations and applied thickness variations. (Verify all calculations)

Based on 3" fluted metal deck with 3/4" relief joint.

Opening Width (inches)	*Coverage Rate in Lineal Feet Per Gallon at Application Thickness of 1/8 inch
1/2	102
3/4	88
1 1/2	61
2	51
2 1/2	44
3	38
3 1/2	34
4	30
5	25
6	22

*Calculation includes 1/2" overlap along both edges of opening

METACAULK RECOMMENDS THE USE OF AIRLESS PAINT SPRAYERS TO APPLY METACAULK 1200

Recommended Spray Equipment

Graco Ultramax II 595 and 695 series sprayers or equivalent

Titan Impact 640 and 740 series sprayers or equivalent

Sprayers must be capable of a minimum of .70 gallons per minute volume at 2,800 psi with up to a .027-inch tip size.

Sprayer Set Up

1. Remove all internal filters from sprayer and spray gun (if equipped).
2. Use minimum 3/8-inch hose for hose lengths up to 50 feet and minimum ½-inch hose for hose lengths over 50 feet up to 100 feet.
3. Ensure pump is properly lubricated prior to operating equipment.
4. Connect hose to pump and hose to spray gun, ensuring all fittings are air tight.
5. Connect sprayer to properly grounded electrical supply with appropriate voltage for the spray pump.
6. Remove tip guard for priming process.
7. Relieve any pressure in the system by depressing the trigger on the spray gun, rotate the prime valve open and closed during this process to ensure any back pressure is removed.
8. Prime the spray pump by inserting the spray pump's siphon tube into the firestop material to be used, it is best practice to place the prime tube outside of the material container and into an appropriate receptacle to capture any cleaning solution or residual material.
9. With prime valve in the open position, turn the pressure controller to its lowest level and turn the pump on, with the pump on, gradually increase pressure to allow material to flow through the prime tube into the catch receptacle until there is no visible air exiting the prime tube and only a continuous flow of the material to be sprayed.
10. The prime valve can now be rotated to the closed position and increase pump pressure to the level required to apply material, usually 1,800 to 2,500 psi. with the spray guard removed point the spray gun into the catch receptacle used for the prime tube or another appropriate area and depress the spray gun trigger until the material to be applied flows through the gun without air or cleaning residue present.
11. Install the appropriate tip and tip guard onto the spray gun with the tip for joint width, material depth and material type. Always confirm tip and pressure settings on a test area before commencing work.
12. Adjust the pressure of the spray pump until the desired spray pattern is achieved, increase spray pressure to eliminate heavy edges, if spray continues to be heavier on the outside edges change spray tip to a smaller orifice size.

Application

1. Use even continuous movements maintaining a consistent distance from the substrate surface to apply spray material ensuring spray coverage as required by the testing and installation instructions.
2. If the spray tip becomes clogged, rotate the spray tip to the clean position and discharge the spray gun into an appropriate receptacle until the clog is removed.
3. Rotate the tip back to the spray position for use.

Cleaning & Maintenance

Clean the spray pump, hose and sprayer at the end of usage daily. Do not let the spray pump sit with material inside for prolonged periods.

Water based products use warm water with a mild detergent, using a minimum of 10 gallons or until the cleaning material flows clearly through the spray pump.

1. To clean the spray pump, turn the power off and remove pressure from the spray pump and spray gun.
2. Insert the siphon tube into the cleaning fluid and remove the spray tip guard
3. Follow the process of priming and setting up the spray pump as outlined previously to run at least 5 gallons of the cleaning solution through the spray pump after it has been primed, recycling the cleaning material into the cleaning fluid bucket.
4. Circulate 5 gallons of the cleaning fluid through the system on normal spray mode dispensing and recycling spray material into the bucket of cleaning liquid.
5. With a new 5 gallon pail of cleaning solution cycle the material through the equipment dispensing the cleaning material into a separate 5 gallon pail.
6. Repeat this process with cleaning solution and discharge the material into a separate bucket until the discharged cleaning material flows without residue of firestop material and cleaning solution is contaminant free.

Tip Guide

Recommended are tip sizes ranging from .015-.019 and fan patterns from 2 to 4.

The first number is ½ of the spray fan width at 12 inches so a .225 would have a 4-inch-wide fan pattern. The second 2 numbers represent the orifice size, in the case above this would be a .025 spray tip opening.

Limited Warranty

For more information on our product warranty, visit rectorseal.com.

Manufactured by

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