

PRODUCT DATA SHEET

Metacaulk® 1100 Spray Applied Mastic

June 2011



Classified System Numbers

TRC/PV 60-04 and TRC/PV 120-14, HDW 0018, HWD0093, HWD0095, HWD0125, HWD0113, HWD0115, HWD0179, WL1183, WJ1083,

1. Product Description

Metacaulk® 1100 is a one component, general purpose fire rated sealant for construction joints such as top of the wall, curtain wall perimeter, expansion, control, etc. and for general construction gaps and voids. Metacaulk® 1100 is a water based, mastic grade extremely intumescent sealant that is designed for spray application and to provide a fast, economical means of installation on long joint runs. It cures to a flexible membrane seal that is suitable where dynamic movement is expected. In the event of a fire, Metacaulk® 1100 will prevent the spread of flames, smoke, hot gases and water through the joint openings. No dilution or mixing is required for use. Metacaulk® 1100 can be applied with a spray pump, brushed or troweled from the pail. Metacaulk® 1100 systems are rated for both 1 and 2 hour conditions in accordance with the ASTM E 814 (UL 1479), CAN4-S115 AND UL 2079 (Tests for Fire Resistance of Building Joint Systems) test standards. **Metacaulk® 1100 is protected in a wet stage as well as in a dry stage against mold growth with a combination of biocides.**

Use Metacaulk® 1100 for various applications:

Top of the Wall Construction Joints

Deflection Track Wall Systems

Curtain Wall Joints

Floor Slab Perimeter Joints

Wall to Floor Joints

Floor to Wall Joints

Expansion Joints

Control Joints

Concrete on Steel Deck to Wall

1 and 2 Hour Gypsum Walls

Concrete and Concrete Block (CMU) Walls

For complete list of product applications or for additional technical information, call RECTORSEAL for the latest updated information.

Metacaulk® 1100 Features

- Sprayable, Brushable or Trowelable
- Water Based
- Excellent Freeze-Thaw Characteristics
- Flexible Set
- Highly Intumescent
- Paintable
- VOC Compliant
- Safe and Easy to Use
- Minimum 2 Year Shelf Life

2. Material Properties

Asbestos Fillers	None
Solvents	None
Hazardous Ingredients	None



Application	Spray, Brush or Trowel
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Activation of Intumescence:

Expansion Begins	375°
Expansion Greatest	575°F to 1100°F

Color	Red
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Cure Time	5 to 7 days (1/8" at 77°F)
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Density	10.2+/- 0.3 lbs./gal.
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Viscosity	120,000 to 150,000 cps
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Flexible	Yes
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Freeze-Thaw	Excellent
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Skin Over Time	30 - 45 min. (at 77°F)
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pH Value	6.5 to 7
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Volume Coverage:

For 5 gallons	1155 cu. in.
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VOC	Negligible
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ASTM E 84, UL 723 Tunnel Test

Flame Spread	5
Smoke Index	10

Sound Transmission Class

STC 54*

*Tested in a UL 411 wall assembly/section to ASTM E90.

3. Applications

Metacaulk® 1100 can be used as a general purpose fire rated mastic/sealant and smoke seal for construction joints on both vertical

and horizontal surfaces. Metacaulk® 1100 is also an excellent fire rated acoustical sealant and can be used in areas under constant vibration or movement. Use Metacaulk® 1100 to prevent the spread of fire and smoke through joints in fire rated gypsum wallboard partitions, concrete block or concrete walls and/or concrete or corrugated steel deck floor/ceiling assemblies.

4. Installation Data

Tightly pack the flutes of the corrugated deck, relief joint and any other gaps with the appropriate backing material as listed in the selected UL System design. Double fold fiberglass insulation batts to obtain a minimum 3.5 pcf compression. The packed insulation should be flush with or slightly bulged out from the wall surface. There should be no loose insulation, voids or gaps present. Mineral wool 4, 6 or 8 lb. density may be used in place of the fiberglass batts.

For Metacaulk® 1100 application, use recommended spray equipment. Contact Technical service at 1-800-231-3345 for current recommendations.

When system clean up is needed, follow manufacture's instructions for specific equipment used. Clean water should be used to flush through the system. Pump out all remaining Metacaulk® 1100 into an appropriate container for later use. Then pump clean water through the system, purging any remaining mastic in the pump, hose and spray gun until thinned mastic and water begin to appear at the spray gun nozzle. Continue to flush clean water through the pump until all residue of mastic has been removed. Discard the flush into an appropriate waste disposal container.

After multiple spray operations and clean-ups have occurred, it may be necessary to remove any built up mastic within the system by flushing with a suitable water miscible solvent such as methyl ethyl ketone (MEK) or a glycol ether (such as Dowanol PM). After pumping the solvent through the system, flush additional water through to remove any remaining solvent. Appropriate precautions should be observed when using any solvent. Always properly collect and

dispose of water flushes, solvents and solvent/water mixtures in accordance with all local, state and federal regulations.

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

5. Testing Data

Metacaulk® 1100 has been listed by UL and Warnock Hersey International, Inc. Listed System Numbers are TRC/PV 60-04 and TRC/PV 120-14 and HWD 0018. Additional listings can be obtained by calling RECTORSEAL. For specific test criteria, refer to the UL Fire Resistance Directory or the Warnock Hersey International Listing Directory or call RECTORSEAL.

Metacaulk® 1100 was tested at positive pressure with a minimum 0.01 (2.5 Pa) inches water and in accordance with ASTM E 814 (UL 1479), UL 2079.

6. Storage & Handling

Metacaulk® 1100 should be stored in unopened container between 35° and 120°F to obtain a minimum 2 year shelf life. NOTE: Do not dilute; no mixing is required. Best if protected from freezing. If freezing occurs, thaw completely before using. Keep products stored under protective cover in original containers.

7. Availability

Metacaulk® 1100 is available in 5 and 30 gallon pails.

8. Limitations

Metacaulk® 1100 is not designed to be used in areas under continuous immersion or in areas which would be continuously wet. Metacaulk® 1100 should not be used on hot uninsulated surfaces above 200°F.

9. Cautions

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

PRECAUTIONS: Do not take internally. May be harmful if swallowed. May cause eye and skin irritation if prolonged or repeated contact occurs. Wash after handling. **FIRST AID:** For any overexposure, get immediate medical attention after first aid is given. **Eyes** - Flush 15 minutes with clean water. **Skin** - Wash with soap and water. **Inhalation** - Remove to fresh air. **Ingestion** - Only if conscious, give large amounts of water and INDUCE VOMITING. **FIRE AND SPILLS:** Use water fog, CO₂, foam, or dry chemicals. Wipe up spills to prevent footing hazard. Clean up with scrapers and water. **STORAGE AND HANDLING:** Store away from heat sources. Keep container closed. Do not reuse empty container. **KEEP OUT OF REACH OF CHILDREN.**

For additional information, refer to Material Safety Data Sheet.

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METACAULK® 1100 COVERAGE RATE:

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

Opening Width (inches)	*Coverage Rate in Lineal Feet Per Gallon at Application Thickness of:		
	1/8 inch	3/16 inch	1/4 inch
1/2	102	68	51
3/4	88	58	44
1	77	51	38
1 1/2	61	41	30
2	51	34	25
2 1/2	44	29	22
3	38	25	19
3 1/2	34	22	17
4	30	20	15
5	25	17	12
6	22	14	11

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

10. LIMITED WARRANTY

RectorSeal makes the Limited Express Warranty that when the instructions for storage and handling of our products are followed we warrant our products to be free from defects. THIS LIMITED EXPRESS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATION ON THE PART OF RECTORSEAL. The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and RectorSeal shall not be liable for incidental or consequential damages.

Suggestions and recommendations covering the use of our products are based on our past experience and laboratory findings. However, as we have no control as to the methods and conditions of application, we only assume responsibility for the uniformity of our products within manufacturing tolerances.