


30-60 Thermfas® heat transfer cement

Colour
Black

Application Consistency (ASTM E24)
Trowel, rubber glove, or pressure extrusion

Gallon Weight (ASTM D1475)
13.2 pounds (1.58 kg/l)

Average Non-Volatile (ASTM D1644)
74% by volume

Coverage Range (FSTM 71)
(lbs. per lineal feet)

Tracer Size Coverage
9.5 mm O.D. ± 0.25 l/m[1] 12.7 mm O.D. ± 0.35 l/m[1]
19.0 mm O.D. ± 0.75 l/m[1] 25.4 mm O.D. ± 1.00 l/m[1]

Drying Time (ASTM C461)
Touch : 2 hours
Through : See application guide

Thermal Conductivity
(K) Factor 100 BTU/hr./sq. ft./°F/inch ± 10%

Compressive Strength (ASTM D695)
1300 psi

Tensile Strength (ASTM D638)
255 psi

Linear Shrinkage
1% (on metal surfaces) 4.5% (unattached)

Volume Resistivity (ASTM D257)
56.09 ohm-cms

Linear Coefficient of Thermal Expansion (ASTM D696)
1.05 x 10-5 inches/F

Service Temperature Limits (FSTM 70)
(Temperature at coated surface) -73°C to 315°C
continuous -73°C to 400°C intermittent

SafetyWet Flammability (ASTM D1310)
Non-flammable

Dry Combustibility (FSTM 44)
Incombustible

Foster Thermfas® Heat Transfer Cement 30-60 is a water-base inorganic cement designed to improve the efficiency of conventional steam traced or electrical resistance heating systems.
The high thermal conductivity properties of 30-60 compare favourably with the full jacketed systems and enable a cost saving of 75 to 80%. 30-60 works equally well in heating or cooling installations.

Limitations

Store between 5°C and 32°C.

Apply between 5°C and 38°C.

Do no apply over aluminium.

Use within six months for best application properties.

Protect 30-60 from rain until insulation is installed.

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FSTM: Foster Standard Test Method

FOSTER THERMFAS® HEAT TRANSFER CEMENT 30-60

Caution: May cause skin irritation. Avoid contact with skin or eyes. In case of contact, flush skin or eyes with water for at least 15 minutes. For eyes, get medical attention.

Application
To insure good bond to bare metal, surface should be clean, dry and free of rust, scale, oil or mill varnish prior to attaching the tracer and applying 30-60. A portable sandblaster or a grinding wheel can be used for cleaning metal surface. Apply 30-60 by glove, pointed trowel, or pressure extrusion equipment, being careful to force 30-60 into the crevice between tracer and pipeline. 30-60 should cover the tracer by at least 6.5 mm. The contact area of 30-60 on the pipe or vessel should be three times the width of the tracer.

Pressure Extrusion Equipment
30-60 may be pressure extruded using a Graco 24:1 Mogul Pump package 225-951. This package includes a Mogul 24:1 single action shovel-loading pump, a two-wheel truck and manual elevator for manoeuvrability, an air regulator, a Graco Flo Gun No. 204-355 with a 3/8 in. fluid outlet, 15 feet of ¾ in. i.d. fluid hose with 6 feet of ½ in i.d. whip-end, and an inductor-type follower plate. A flow rate of approximately 15 gallons per hour can be obtained with a pressure of 100 psi on the pump gauge. If a bead larger than 3/8 in. is required, the whip-end should be removed and a ¾ in. bead can be laid directly from the main hose. When the gun is removed, the only control of the material flow is at the pump. Consult your pump supplier for additional application instructions.

Drying Time
30-60 must be thoroughly dry before process equipment can be used at design operating temperatures. Total drying time is approximately 48 hours depending on ambient circumstances and can be accelerated by air drying 4 hours followed by intermittently passing atmospheric steam (100°C) through the tracer line for 24 hours (to maintain 30-60 at 82°C to 93°C).

Clean-Up
Use clean fresh water to clean tools and equipment before 30-60 dries.