Blome CS-1100
Moisture Cured Composite Strengthening Wrap

DESCRIPTION AND USES

CS-1100 is a low cost composite system for use in repair and reinforcement of existing mechanical systems, structures and piping. Furnished factory-impregnated with a proprietory resin system, it is odorless and non-flammable. CS-1100 is ready to apply, right out of the bag and cures by way of a chemical reaction with field-applied water. When cured, it is a very durable, high strength material that is impervious to fuels, most chemicals and solvents. It permanently bonds to a wide variety of surfaces such as metals, composites, concrete, plastics, and wood.

ADVANTAGES/BENEFITS

CS-1100 is the perfect solution for quick repairs on piping, structural steel and other items. Using this knowledge of advanced composite systems, this product has been developed and perfected the use of composites for the repair and rehabilitation of infrastructure components. Strong and lightweight, composites offer an excellent alternative to conventional methods. They are resistant to corrosion and chemical attack, have strength characteristics similar to steel, and can be customized to meet your requirements.

PACKAGING/COVERAGE

CS-1100 is available in prepackaged units. Consult Blome for specific unit Sizes.

TYPICAL PROPERTIES

Max Temp Use	288° F (TG Degrees F)
Working Time	30 minutes nominal, after water application
Cure Time	60 minutes nominal, after water application
Chemical Resistance	Resistant to acetone, MEK, toluene, gasoline, ethyl alcohol and many others
Adhesion	1,000 psi (lap shear) to abraded carbon steel, using BP-1 Primer
Tensile Strength	54,000 psi for the Standard G-03 Fabric (equivalent to 694 lbs/per ply/per inch of width)
Compressive Strength	28,500 psi for the Standard Fabric
Interlaminar Shear	2,900 psi for the Standard Fabric

STORAGE TEMPERATURE

Storage temperature should be 55°-85°F. Applying temperature should be at least 55°F while applying this system and while it cures. If you wish to attempt to apply in cooler temperatures, tarp and heat the area to be coated to create and maintain the minimum 55°F conditions. Stop application if the temperature falls within 5°F of the dew point. Twenty-four hours before application, all materials should be stored at 75°F-85ºF, to facilitate handling.

SURFACE PREPARATION

Surface must be clean and sound. It may be dry or slightly damp, but free of standing water and frost. Remove dust, laitance, grease, curing compounds, impregnations, waxes, foreign particles, disintegrated materials and other bond inhibiting materials from the surface. Existing uneven surfaces must be filled with an appropriate repair mortar. The adhesive strength of the concrete must be verified after surface preparation by random pull-off testing (ACI 503R) at the discretion of the engineer. Minimum tensile strength, 300 psi with concrete substrate failure.

MASKING

Masking surfaces that are not to be wrapped is recommended. The Blome System is difficult to remove, once cured.

APPLICATION

1.Tear open the foil wrapping, remove CS-1100 and any other inner wrapper. Proceed to soak the CS-1100 in water, squeeze the fabric while submerging in the water to make sure enough water is soaked in to the CS-1100 fabric. Press the end of the roll on the pipe which being applied to, an assistant will have to hold the beginning of the fabric in tight contact with the pipe. Proceed to pull significant tension on the roll and wind it around the pipe until the requisite number of layers is applied, thoroughly spraying with water. Spray every layer with water before wrapping new layer on top. Keep tension at all times.

2. As a new roll is opened, there is a new starting point. Wrap the new starting point over the previous rolls end by a distance equal to at least the width of the size of the Blome CS-1100 fabric.

3. MAKE SURE TO KEEP ALL OF APPLIED FABRIC WET. SPRAY DOWN WITH WATER AFTER APPLIED TO THE PIPE, FABRIC SHOULD BE MISTED THOUROUGHLY WITH WATER.

CUTTING FABRIC

Fabric can be cut to appropriate length by using a commercial quality heavy duty scissor. Since dull or worn cutting implements can damage, weaken or fray the fiber, their use should be avoided. Consult MSDS for proper handling procedures.

CLEANUP

Before material gels, tools and equipment should be cleaned using a citrus based, biodegradable cleaner. After system components begin to cure, xylene or MEK will be required.

LIMITATIONS

Design calculations must be made and certified by an independent licensed professional engineer for use as a structural design repair. System is a vapor barrier. Saturated concrete should not be encapsulated in areas of freeze/thaw.

WARRANTY

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only. WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANTABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH. We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.