



Grout Diaper

forms for applying grout to pipe joints

CONCRETE INFRASTRUCTURE



MarMac's Grout Diapers (or Grout Bands) are stay-in-place cement forms which provide a functional barrier between the harsh and often corrosive environment and pressurized steel pipe joints. Under most conditions, portland cement is alkaline (pH of about 12.5). Commonly, due to the presence of calcium hydroxide, a passivating iron-oxide film will form on the steel joint, resulting in almost complete corrosion inhibition. Grout Diapers protect against leaching, which reduces the pH in the cement grout surrounding the joint steel, while simultaneously resisting the intrusion of salts, chlorides, acids, and sulfates that can affect the inhibitive properties of the grout. Grout Diapers also isolate the protective grout from aggressive soils that correlate with highly corrosive electrical current.

Features & Benefits

- Protects joint steel from corrosion
- Prevents leaching
- Defends against acids & sulfates
- Guards joints from electrical current





Grout Diaper data sheet

Applications

- Cement-coated steel pressure pipe

Versions

- Standard Grout Diapers
- Stretch-Cote Grout Diapers
- Foam Grout Diapers

Specifications

Polypropylene fabric (Tytar®) is made with bonded, continuous filaments of polypropylene. It works as an exceptionally strong, dimensionally stable form that molds and holds the weight of the fresh grout. Specialized closed-cell polyethylene foam (Foam Grout Diapers only) is produced according to pipe joint Grout Diaper specifications. This specific foam is resistant to water and most chemicals, including acids, alkalines, and solvents. A thin membrane (0.07") consisting of layers of polyfilm and rubberized asphalt provide a continuous isolation seal and moisture barrier, protecting the cured grout from exterior elements (Stretch-Cote Grout Diapers only). Steel straps are sewn into the diaper hem to securely tie the diaper to the pipe.

The width of the Grout Diaper will be governed by the width of the joint space and the type of pipe being used. The width should be sufficient to bridge the joint space and be secured to the pipe walls on each side of the joint without failure due to slippage.

The length of the Grout Diaper will be governed by the circumference, with extended tab lengths to accomplish overlapping of the ends once the joint has been filled with grout.

TYPICAL PROPERTIES

FABRIC

Material	Non-Woven Polypropylene
Minimum weight	3 oz/yd ²

STRAPS

Material	Heat-Treated or Hot-Rolled Steel
Standard	Class I, Type I
Thickness	≥ 0.02"
Coating	Waxed or Painted/Waxed

FOAM (*Foam Grout Diapers only*)

Material	Closed-Cell Polyethylene
Density	1.9 – 2.2 lbs/ft ²

BARRIER MEMBRANE (*Stretch-Cote Grout Diapers only*)

Material	Polyfilm (0.01"), Rubberized Asphalt (0.06")
Thickness	0.07"



Grout Diaper data sheet

Storage

Store in a dry, cool place.

Installation

Apply the Grout Diaper around the pipe joint, spanning the joint, with the foam-lined side against the pipe wall. The tab ends of the Grout Diaper extend beyond the strap exit hems. Fold these tabs back, tightening the straps around the pipe and crimping the seals.

With the tabs folded back, the pouring gap is exposed at the top of the pipe. Pour portland cement grout into the joint recess until the entire joint recess is full. If necessary, use a stiffer grout mix to fill the pouring gap.

When the diaper has been completely filled with grout, fold the tabs back across the filled pouring gap. The tabs should be lapped and pressed tightly into the fresh grout, and sufficient weight (fresh grout recommended) placed on top of the tabs to keep them sealed while backfilling.

Standard Grout Diaper

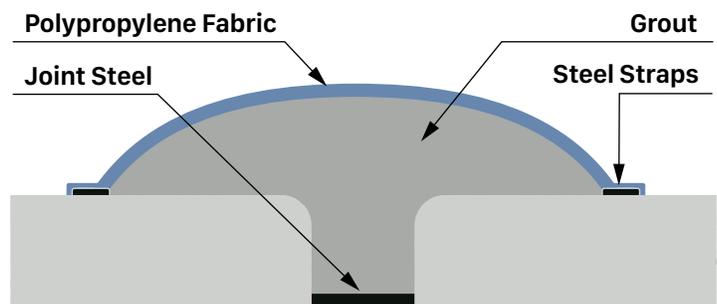
MarMac's Standard Grout Diaper provides the best method of applying Portland cement grout into pipe joints. When mixed to a freely pouring consistency, the Portland cement grout penetrates into every opening of the joint. Because it bonds to and becomes part of the pipe itself, it is the most compatible material that can be used to seal concrete pipe joints.

Standard Grout Diapers are manufactured with Tytar®; a tough, non-woven material made of polypropylene fibers. This durable, mildew-proof fabric stands up to almost all chemicals and works to add strength to the joint once it is in the ground.



Availability

- Pipe sizes: 12-144"
- Widths: 9, 12, 15, 18, 24, 30, 36"
- Thickness: 1, 2-ply





Grout Diaper data sheet

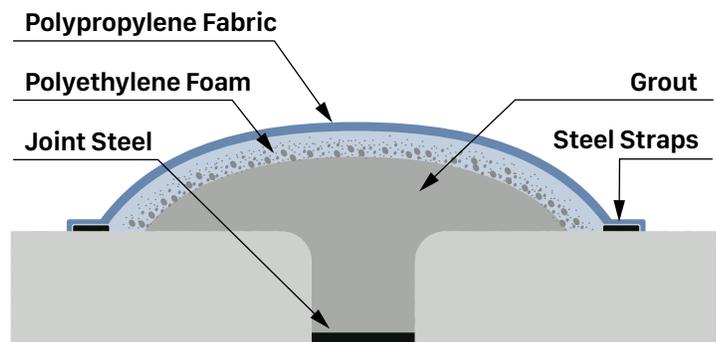
Foam Grout Diaper

MarMac's Foam Grout Diaper is manufactured with an exterior layer of durable, non-woven fabric made of bonded, continuous filaments of polypropylene. An internal layer of expandable, closed-cell polyethylene foam is designed to allow cement grout to fill the hollow cells and mechanically bond the impermeable foam membrane with the cement-filled joint. The foam component has been tested to be impervious to water and most chemicals, and resistant to most acids, alkalies, and solvents.



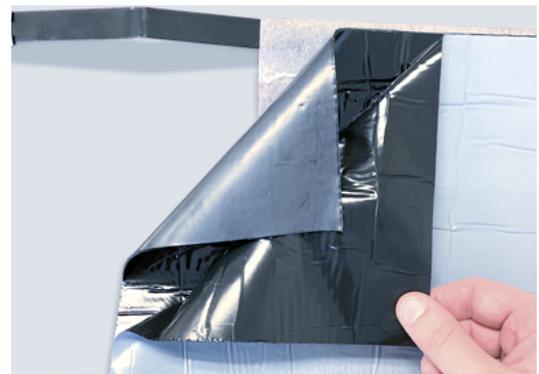
Availability

- Pipe sizes: 12-144"
- Widths: 9, 12, 15, 18, 24, 30, 36"
- Thickness: 1, 2-ply



Stretch-Cote Grout Diaper

MarMac's Stretch-Cote Grout Diaper is lined with an exterior layer of polypropylene fabric. A middle layer of polyethylene film provides a more comprehensive moisture barrier. A 60 mil base layer of rubberized-asphalt mastic is protected by release paper until ready for use. At the time of installation, the release paper is removed and the mastic is applied around the pipe circumference, centered on the joint to create a complete seal prior to being filled with portland cement grout.

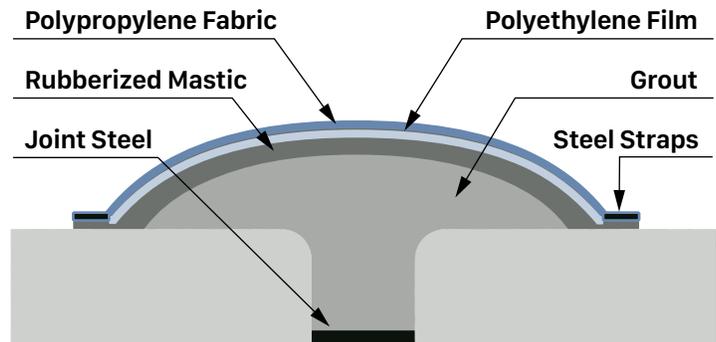




Grout Diaper data sheet

Availability

- Pipe sizes: 12-144"
- Widths: 9, 12, 16"



For more information, additional instructions, or questions regarding Grout Diapers, visit marmac.com/Grout-Diaper or scan the QR code on the first page.

CAUTION: Prior to use, please read the Manufacturer Warranty & Disclaimer found at marmac.com/cp/disclaimer.

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