

INNOVATION TO MAKE IT FIRST,
QUALITY TO MAKE IT LAST.



BLAIR
RUBBER COMPANY

SECONDARY CONTAINMENT CORROSION RESISTANT LININGS



MARSEAL[®]
CORROSION RESISTANT LININGS

ISO 9001:2008 Certified

www.blairrubber.com

DESCRIPTION

MARSEAL® refers to a family of reinforced thermoplastic and special, rubber-based sheet membranes. Their primary application is to protect concrete from corrosion due to chemical attack.

MARSEAL® sheet linings reduce the amount of surface preparation required on remedial concrete applications while providing unique benefits.

BENEFITS

Excellent broad-based chemical resistance. See our Chemical Resistance Guide

Long-term ability to bridge cracks and accommodate movement

Excellent ozone and UV resistance

Excellent puncture resistance

Superior resistance to fungal or bacteriological attack

The welded seam construction provides absolute security in fluid containment through the finished installation of a one piece elastomeric lining system. *MARSEAL*® linings, when compared to field mixed and applied liquid resin coating and lining systems, reduce application time and can be placed in service immediately upon completion. There is no cure time waiting.

CHEMICAL RESISTANCE

MARSEAL® linings provide for excellent chemical resistance across a broad range of organic and inorganic acids, caustics, petroleum-based derivatives, and aromatic and chlorinated solvents. Consult our Chemical Resistance Guide for specific recommendations.

STORAGE & HANDLING

MARSEAL® sheet membranes are pre-cured materials and therefore will not experience accelerated aging. When installing *MARSEAL*®, the ambient temperature must be above 40°F.

TYPE OF MATERIALS

MARSEAL® linings are provided in calendered or extruded sheet form which guarantees uniform mil-thickness. The linings are available in self-adhesive form to provide 100% surface bonding or in non-adhesive form to allow for a loose-laid liner over earthen dikes or badly contaminated concrete.

METHODS OF JOINING

A mandatory requirement in the application of all *MARSEAL*® linings is that the seams are thermally welded, delivering total containment integrity through a one piece liner construction.

Seam bonding is accomplished with a robotic or handheld hot-air welder providing assured seam integrity in a non-hazardous working environment.

TECHNICAL SERVICE

Blair Rubber Company maintains a staff of Technical Service Representatives who are available to assist in product recommendations, installation training, inspection, etc. In the event of difficulties in installing *MARSEAL*® linings, contact our Technical Department immediately.

WARRANTY

Blair Rubber Company stands behind all of its products by offering comprehensive product and system warranties for your protection. Contact Blair Rubber Company's corporate office for details. No statements contained in this publication are intended or should be construed as creating any express warranty or representation outside the scope of Blair Rubber Company's warranty documents.

MARSEAL®

CORROSION RESISTANT LININGS

- Broad-based chemical resistance. Resists acids, caustics, hydrocarbons, and aromatic and chlorinated solvents.
- Excellent ozone, weather, UV, and water resistance
- Required elongation for effective crack bridging and toleration of movement
- Innovative application techniques resulting in more cost effective installations
- Superior puncture and fungal resistance
- Can be surface adhered or loose-laid



1. SURFACE PREPARATION

Start all MARSEAL® installations with smooth, clean, dry substrate, free of large voids, loose aggregate, and sharp projections. Blasting is not required if the surface is clean and smooth. Spalled or missing concrete must be repaired at least 1 week prior to membrane installation

2. PRIMING

Priming is required to improve the bond strength of MARSEAL® 4000 to the substrate. MARSEAL® Primer must be applied to all surfaces with a short nap roller or brush. Allow primer to dry to the touch before lining application. (approximately 1 hour)

3. COMPONENT PLACEMENT

Install MARSEAL® Sealing Strip and pre-formed corners where required using a hot air welder and 2" roller.

4. INSTALLING WALL SHEETS

Measure and pre-cut MARSEAL® lining into appropriate wall and floor length before the installation starts. Apply membrane to the wall area first, allowing 6" to extend over the top of the wall. Lay each adjacent sheet with a 2" side lap (fully cover lay line to ensure proper lap).



5. ROLLING WALL SHEETS

After each sheet is applied, use wall roller to tightly adhere sheet to primed surface.



6. INSTALLING FLOOR SHEETS

Apply floor sheets in similar fashion to walls, overlapping sides by 2" (covering lay line on previous sheet) until entire floor is covered.



7. ROLL FLOOR

After each floor sheet is applied, use linoleum roller to tightly adhere sheet to primed surface.



8. WELD LAPS

After all lining is applied, weld all side laps with a hot air welder, followed immediately with a 2" roller to fuse sheets together.



9. FINISH

Install MARSEAL® Sealing Strip over all perimeter laps and corner seams using a hot air welder and 2" roller. This will both seal and strengthen the lining perimeter.

CHEMICAL RESISTANCE

See our Chemical Resistance Guide on our web page for more specific details.

FOR MILD ACIDS, CAUSTICS AND HYDROCARBONS

M-3500 - 75 mil membrane, loose-laid

M-4000 - 90 mil heavy-duty system, fully-adhered

FOR CONCENTRATED ACIDS AND SOLVENTS

M-7000 - 50 mil membrane, loose-laid

M-8000 - 65 mil system, fully-adhered

COMPONENTS, CAULKS AND SEALANTS

A specialized selection of products to complete successful installations of MARSEAL® Corrosion Resistant Linings systems.

USES

MARSEAL® linings allow for the utilization of concrete to convey or contain regulated materials such as corrosive, reactive, or toxic liquids in such typical areas as:



The unique properties of MARSEAL® flexible sheet membranes combined with hot-air welded seam construction provide absolute security in primary and secondary containment.

SECONDARY CONTAINMENT

Tank farm dikes	Trenches
Catch basins	Sumps and pits
Tank and pump pads	Pipe chases
Settling and retention basins	Oil skimmers
Flumes and chutes	Vessels

PHYSICAL PROPERTIES

MARSEAL® linings allow for the utilization of concrete to convey or contain regulated materials such as corrosive, reactive, or toxic liquids in such typical areas as:

M-3500 & M-4000		
PROPERTY	TEST METHOD	RESULT
Hardness	Shore A	85A+/-5
Elongation	ASTM D412	170%
Tensile Strength at Yield	ASTM D412	1500 lbs./in ²
Tear Strength	ASTM D624	330 ppi
Low Temperature Flexibility	ASTM D2137	Pass
Water Absorption	ASTM D471	<0.1%
Water Vapor Transmission	ASTM E96	0.065 grains/h-ft. ²

M-7000 & M-8000		
PROPERTY	TEST METHOD	RESULT
Hardness	ASTM-D412	12.6 Mpa
Elongation	ASTM-D412	600%
Tensile Strength at Yield	ASTM-D624/C	42.5 KN/M
Tear Strength	ASTM-D1149	No Cracks
Low Temperature Flexibility	ASTM-D471	2.4%
Water Absorption	ASTM-D816	No Cracks
Water Vapor Transmission	ASTM-D816 modified	Membrane Rupture

Teamwork

Dedication

Quality

Experience

BEFORE



AFTER



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