

Physical Properties: Complies with CSA A123.23-15, Type B, Grade 3.

| Properties | Requirement | Before Heat Conditioning | After Heat Conditioning |
|--|----------------------|---|--|
| Strain energy, min MD/XD At 23 °C ± 2 °C (73.4 °F ± 3.6 °F) At -18 °C ± 2 °C (0 °F ± 3.6 °F) | 5.5 (31) 3.0 (17) | 7.3/5.9 kN/m (41.4/33.4 lbf/in) 5.8/5.2 kN/m (32.9/29.5 lbf/in) | 6.9/5.6 kN/m (39.1/31.8 lbf/in) 5.2/4.5 kN/m (29.5/25.5 lbf/in) |
| Peak load, min MD/XD At 23 °C ± 2 °C (73.4 °F ± 3.6 °F) At -18 °C ± 2 °C (0 °F ± 3.6 °F) | See tested value | 15.7/11.5 kN/m (89.0/65.2 lbf/in) 20.2/13.7 kN/m (114.5/77.7 lbf/in) | 15.6/11.3 kN/m (88.4/64.1 lbf/in) 15.0/11.8 kN/m (85.1/66.9 lbf/in) |
| Elongation at peak load, min MD/XD At 23 °C ± 2 °C (73.4 °F ± 3.6 °F) At -18 °C ± 2 °C (0 °F ± 3.6 °F) | See tested value | 28.8/31.2 % 16.6/21.0 % | 23.7/22.2 % 15.3/19.2 % |
| Ultimate elongation at 23 °C ± 2 °C (73.4 °F ± 3.6 °F) MD/XD | See tested value | 28.8/31.2 % | 23.7/22.2 % |
| Low temperature flexibility, max MD/XD | -18 (0) | -18/-18°C (0/0°F) | -18/-18 °C (0/0 °F) |
| Compound stability, min | 102°C (215°F) | Pass 107 (225) | |
| Dimensional stability, max MD/XD | 1.0 % | ±0.2/±0.2% | |
| Resistance to Puncture | Pass/Fail | Pass | |

All values are nominal. | NA: Not Applicable

Packaging

| Product | Thickness mm (mils) | Selvedge Thickness mm (mils) | Mass per unit area kg/m ² (lb./100 ft ²) | Back Surface Coating Thickness Min. mm (mils) | Roll Length M (ft) |
|------------------|------------------------|------------------------------------|---|---|-----------------------|
| Requirement | 2.2 (85) | 2.2 (85) | 2.6 (53) | 1.0 (40) | NA |
| NP180p/p | 3.0 (118) | NA | 3.3 (68) | 1.0 (40) | 10 M (32.9 ft) |
| NP180 Tack Sheet | 3.0 (118) | 3.0 (118) | 2.9 (60) | NA | 10 M (32.9 ft) |
| NP180s/p 3.5 mm | 3.5 (138) | NA | 4.4 (90) | 1.0 (40) | 10 M (32.9 ft) |
| NP180s/p 2.2 mm | 2.2 (85) | 2.2 (85) | 2.6 (53) | 1.0 (40) | 15 M (49.2 ft) |
| NP180p/s | 2.2 (85) | 2.2 (85) | 2.6 (53) | NA | 15 M (49.2 ft) |

All values are nominal.

Uses

modifiedPLUS® **NP180p/p Base Sheets** are designed for use as the base or first ply in a high-performance two-ply modified bitumen roofing system, or as a ply in two-ply Protected Membrane roofing system. Also, used as a protection sheet in **790-11** Hot Applied Rubberized Asphalt Systems.

- NP180p/p has a thermofusible poly upper and lower surface for torching to substrate and to receive torched on cap sheets
- NP180p/s has a thermofusible poly upper surface to receive torched on cap sheets and a sanded lower surface for mopping or cold adhering to substrate.
- NP180s/p has a sanded upper surface to receive mopped or cold applied membranes or insulation adhesive and a thermofusible lower surface for torch applied installation to substrate.
- NP180s/p 3.5 has a sanded upper surface and a thermofusible upper poly surface for torch application.
- NP180s/s has a sanded upper and lower surface for mopping or cold adhering to substrate and to receive mop or cold adhered cap sheets.
- NP180 Tack Sheet has a poly upper surface to torch cap sheets and a self-adhered lower surface.

Features

- SBS polymer provides flow resistance at high temperatures and flexibility at low temperatures for lasting durability
- Non-woven polyester 180g/m² reinforcement
- Designed for application in new construction, re-roofing and retrofit roofing
- Excellent tear resistance

Limitations

Non-resistant to oils and solvents. Refer to manufacturer for specific chemical resistance.

Storage

Store rolls on end, on original pallets or elevated platform. Protect from weather or store in an enclosed area not subject to heat over 49°C (120°F).

Preparation

Refer to *modifiedPLUS*® General Specifications for preparation and acceptable substrates.

Application

Roll out *modifiedPLUS*® **NP180 Base Sheets** and allow to relax prior to application. Begin application of the base sheet at the lowest edge or drain. Proceed up the slope from the lowest point. Position and unroll base sheet to achieve correct overlap and alignment. Re-roll one end a minimum of 3 m (10') and adhere membrane to substrate. Complete application of remainder of sheet.

Thermofused Application: Use NP180p/p, NP180 s/p

modifiedPLUS® **NP180p/p** must be thermofused to substrate. Heat lower surface of membrane. Sufficient heat must be applied to melt the lower surface and provide a flow of bitumen as the roofing membrane is unrolled. Care should be taken to ensure that heating is even across the width to avoid skips or voids and visible bitumen should flow out from lap to ensure a tight seal.

NP180 Base Sheet

Mopping Application: Use NP180p/s or NP180s/s

Roofing asphalt shall be **SEBS 890-12** or CSA A123.4 M Type 2 on slopes up to 1:16 and Type 3 for slopes greater than 1:16. Use **SEBS 890-12** or Type 3 for all flashing. Asphalt must be applied hot, so that its mopping temperature is not below 204°C (400°F) when measured at the mop cart, to facilitate correct interply thickness, adhesion and uniformity. The roofing membrane must be unrolled into the hot asphalt immediately. Mopping should not be more than 1.2 m (4') ahead of unrolling. Unroll into asphalt mopped at the rate of 1 to 1.5 kg/m² (20-30 lbs./100 ft²), lapping 75 mm (3") on sides and 150 mm (6") on ends. The presence of a bead of asphalt should be observed flowing out of the seams. Mopping at ambient temperatures below 4°C (40°F) requires special care and treatment. Refer to *modifiedPLUS*® General Specifications.

Cold Adhered Application: Use NP180s/s

Apply **MBA Gold® Elastomeric Modified Bitumen Adhesive** by spray or notched squeegee to laps as well as the field of the sheet at the rate of approximately 0.6 l/m² (1.5 U.S. gal./100 ft²). A notched squeegee with notches 6mm (1/4") long, 3mm (1/8") deep, spaced at 25mm (1") is ideal for smooth surfaces. For irregular surfaces the notches should be 6mm (1/4") deep. Best results occur above 5°C (40°F). The adhesive thickens at colder temperatures and proper coverage becomes difficult. Roll out *modifiedPLUS*® NP180s/s and allow to relax prior to application. Apply adhesive to substrate and allow 3 to 5 minutes open time prior to rolling in membrane. Installation without allowing open time could result in prolonged softening of the membrane or blisters.

For flashings, apply **Flashing Adhesive** by brush to substrate and back of sheet, allow approximately 10 minutes open time so that the adhesive becomes tacky. Set flashing in place and apply firm pressure to ensure total and firm contact with substrate.

Self-Adhered Application: Use NP180 Tack Sheet

All substrates to receive *modifiedPLUS*® NP180 Tack must be primed. Use **930-38 Adhesive** applied by brush at a rate of 0.50-0.75 l/m² (100-150 ft²/gal.). Allow an open time of 30 minutes prior to applying *modifiedPLUS*® NP180 Tack Sheet. Alternatively, use **900-34 Rubberized Asphalt Emulsion Primer** applied at a rate of 4m²/l (200 ft²/gal.) at temperatures above 5°C. Roll out *modifiedPLUS*® NP180 Tack Sheet and allow to relax prior to application. Cut lengths to fit application. Set in place and pull back release film 150 mm (6") to 300 mm (12") and place on to prepared surface. Remove release film from remainder of sheet, and apply pressure to ensure proper contact with the prepared substrate. Overlap 75 mm (3") on side laps and 150 mm (6") on end laps. Begin application of **NP180 Tack Sheet** at the lowest edge or drain. Proceed up the slope from the lowest point.<>

Slopes 1:12 (1" in 12") or Greater: In addition to the above, apply membrane parallel to direction of slope and blind nail or mechanically fasten membrane at end or head lap on 150 mm (6") centres.

Warranty

Henry Canada warrants to the owner, that the *modifiedPLUS*® modified bitumen membrane, when installed by a participating contractor subject to the conditions and limitations contained within the warranty, will remain watertight for a period as outlined. All leaks or roof problems, on warranted roofs, must be reported to the manufacturer in writing within a period of 30 days.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on Henry's® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

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