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Stocked in multiple locations in the US and Canada

Standard 100 mil corrosion barrier

Complies with ASME NM.2

Complies with ASTM D5421, ASTM D6041

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Typical Applications

Acids

Industrial wastewater

Seawater

Bases

Brine solutions

Inorganic salts

Used in hundreds of installations in 20 countries around the world.

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Specifications

Resin: INEOS DERAKANE 411™ (Bisphenol A Epoxy Vinyl Ester)

Glass: 'ECR' Glass

Pressure Rating: 150 psi (10 BAR), testing per ASTM D2992

Maximum Test Pressure: 225 psi (15 BAR)


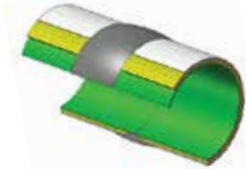
Temperature Range: -40°F (-40°C) to 180°F (82°C)

Surfacing Veil: Polyester (Nexus)

- All pipe, flanges, and fittings have a 100 mil thick corrosion barrier comprised of one layer of veil (chemical barrier) and two layers of chopped strand glass (anti-wicking barrier).
- Manufactured via combination of contact molding and filament winding. Available in sizes 1" - 120" diameter. Refer to our *Pipe Fitting and Dimensions Catalog* for dimensions.
- Minimum Barcol hardness of 90% of resin manufacturer's specified value.
- External resin coating containing paraffin and ultraviolet absorbers to assure proper surface cure and inhibit ultraviolet light degradation.
- Flanges available in either full face FRP or lap joint style. Drilling in accordance with ASME B16.5 Class 150.
- All pipe and fittings manufactured under a formal QA program certified in accordance with Quality Assurance Standard ISO 9001:2015.
- Pipe and fittings shall be shop or field assembled using either RPS matching tapered adhesive joints for sizes 1" - 12", or butt joints, available in all sizes.



Specifications

Joining Systems	
Tapered Adhesive Joints	Butt & Wrap Joints
	
<ul style="list-style-type: none"> • Available with 100 mil lined 150 psi pipe systems 1" - 12" • Fittings are supplied with integral belled ends and pipe is supplied belled by plain end. Components are permanently bonded in the shop or field using RPS adhesive, formulated from the same type of resin used in fabrication of the pipe system liner. • The Tapered Adhesive joint requires less material without compromising strength and can be fabricated in half the time, resulting in significant savings on labor and installation costs. For the full list of benefits refer to <i>RPS Tapered Adhesive Joints - Benefits and Savings</i> found in the Company Literature section of our website. 	<ul style="list-style-type: none"> • Available with 100 mil lined 150 psi pipe systems, all diameters. • Pipe and fitting ends are sanded to prepare a good bonding surface. Components are aligned, "butted" together, and sealed with resin. A "wrap" is applied to permanently bond the components. The "wrap" is made up of layers of glass reinforcement saturated with resin. • A variety of butt joint designs are available depending on the service conditions. These include straight, tapered, and edge capped.
<p>Detailed joining instructions are available in our <i>Installation Manual</i> at rpscomposites.com/company-literature</p>	



HPPE P-150 in service in a cooling water unit.



HPPE P-150 in service at a chemical processing plant.

RPS P-150 Pipe Dimensions						
Pipe Size	Inside Diameter	Liner Thickness	Structure Thickness	Total Thickness	Outside Diameter	Weight
(in)	(in)	(in)	(in)	(in)	(in)	(lbs/ft)
1	1.00	0.11	0.08	0.19	1.38	0.5
1.5	1.50	0.11	0.08	0.19	1.88	0.9
2	2.00	0.11	0.08	0.19	2.38	1.1
3	3.00	0.11	0.08	0.19	3.38	1.6
4	4.00	0.11	0.095	0.205	4.41	2.3
6	6.00	0.11	0.13	0.24	6.48	4.1
8	8.00	0.11	0.17	0.28	8.56	6.3
10	10.00	0.11	0.21	0.32	10.64	8.9
12	12.00	0.11	0.26	0.37	12.74	12.4

P-150 Maximum Recommended Support Spacing at 150 psi				
NPS (in)	Single Span		Continuous Span	
	SG = 1.0	SG = 1.3	SG = 1.0	SG = 1.3
1	6.9	6.7	10.3	10
1.5	7.6	7.3	11.4	10.9
2	8.2	7.9	12.2	11.7
3	9.1	8.7	12.8	11.8
4	10.2	9.7	13.4	12.2
6	12.2	11.3	15.2	13.8
8	14.1	12.9	17.4	15.8
10	15.7	14.3	19.2	17.4
12	17.3	16.3	21.8	20

Pipe Supports

RPS offers a full line of pipe supports specifically designed to match RPS P-150 pipe.

Refer to the *RPS Pipe Supports Catalog* at rpscomposites.com/company-literature.

Notes:

1. Based on DF = 6 and maximum deflection = 0.5"
2. Support spacings apply up to 150°F (65°C). At 180°F (82°C), derate spacings by factor of 0.9.
3. Loads include internal pressure and weight of pipe and contents.

Specifications

Collapse Pressure of P-150 Pipe		
NPS (in)	Collapse Pressure (psi)	
	150°F (65°C)	180°F (82°C)
1	1295	1166
1.5	512	461
2	252	227
3	88	79
4	66	60
6	54	48
8	52	47
10	51	46
12	57	51

Note:

For sustained exposure to external pressure (e.g. vacuum), a design factor of at least 4 should be used as required by ASME NM.2.

Thermal Expansion

For recommendations on accommodating thermal expansion, refer to *RPS Design Manual*. For information on conducting a pipe stress analysis of P-150 piping, refer to *RPS Doc. No. E--433*, available from our Engineering Department.



HPPE P-150 in service at an acid recovery plant.

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RPSComposites.com/company-literature

