

# VE412BN

**Enduraflex™ black, soft, natural rubber lining compounded for impingement, abrasion and HCl service. Exhaust steam or pressure cure.**

## SPECIFICATIONS

**FACE MATERIAL DUROMETER, ATMOSPHERIC CURE:**  
40 to 50 A

**PRESSURE CURE:**  
40 to 50

**AVAILABLE GAUGES:**  
3/16", 1/4", 3/8", 1/2", 4mm, 5mm, 6mm, 10mm

**SKIVE:**  
Open

**REPAIRS:**  
Repair with original lining or C511BN.  
See Section 16 – Repair Procedures.



## TYPICAL PHYSICAL PROPERTIES

Tensile Strength PSI	ASTM D412	3600
% Elongation at Break	ASTM D412	800
Durometer	ASTM D2240	42 A
Specific Gravity	ASTM D297	1.00
Adhesion to Metal	ASTM D429	30 LBS

Notes: For the best appearance of the completed rubber lining, always apply plastic side down against the substrate.

Caution: Soft natural rubber is susceptible to deterioration by sunlight and oxygen. This is known as ‘weather checking’. Do not expose rubber lining to sunlight, ozone or oxygen.

## CURE METHODS AND TIMES:

Autoclave	1/8" to 1/4" 1 hour at 275°F (135°C)
	3/8" to 1/2" 2 hours at 275°F (135°C)
Internal Pressure	4 hours at 235°F (127°C).
	For insulated vessels: 2 hours at 235°F (127°C).
Atmospheric	Step 1 – Observe a gradual warm-up time until reaching 160°F (71°C). This time will vary depending in ambient and other variable conditions specific to the application.
	Step 2 – 24 hours at 180°F (82°C) or 20 hours at 200°F (94°C)

Note: Cure times may require adjustment to compensate for heavy metal thickness, low exterior temperatures or other unusual factors. See Section 14 – Curing Instructions.

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## STORAGE LIFE FROM DATE OF SHIPMENT

32°F (0°C) to 50°F (10°C)	180 days
51°F (13°C) to 65°F (19°C)	90 days
66°F (21°C) to 75°F (23°C)	60 days
76°F (23°C) to 85°F (30°C)	30 days

Storage temperature must not exceed 85°F (30°C)

## ADHESIVE SYSTEM ENDURABOND™ 1\*2\*3 SYSTEM

1st coat on metal:	Primer #1
2nd coat on metal:	Intermediate #2
3rd coat on metal:	Tack #3
On the rubber:	Tack #3

\*Each adhesive component requires thorough mixing before application.

## APPLICATOR NOTES

1. This lining is susceptible to overcure. Overcure or reversion may occur when heat cure time and temperature parameters are exceeded.
2. Plying up layers of rubber lining thicker than 1/4" could result in the rubber flowing or sagging during cure. Test plate is required to determine flow characteristics.
3. The temperature of the substrate must be greater than 60°F (15°C) prior to applying primer and rubber. Temperatures should not exceed 120°F (49°C).
4. A heated table that warms rubber to approximately 120°F (49°C) is best for application.
5. Strict adherence to adhesive specifications is required. Tack time is critical to the success of the bond.



## DISCLAIMER:

The above guidelines are based on general industry practices and not applicable to all installations. Please contact Blair Rubber Company for specific application instructions. Application methods shall conform to Blair Rubber Company instructions contained in the Engineering & Applicator manual. Deviations from the specifications must be approved in writing by Blair Rubber Company. Data values are approximate and may vary based on installation techniques and atmospheric conditions. As such, data values should be used as general guidelines and are not a legally binding warranty of product characteristics. This document is copyright to and the intellectual property of Blair Rubber Company and may not be copied or distributed without prior consent.