



# FIREBARRIER SEAL and SEAL NS

## 1. PRODUCT NAME

A/D FIREBARRIER Seal and Seal NS

## 2. PRODUCT DESCRIPTION

Single component, water based elastomeric sealants intended for use as firestop system components.

**Basic Use:** A/D FIREBARRIER Seal and Seal NS are designed for economical use in joint and service penetration firestop configurations. They form durable, flexible, watertight bonds with most construction materials. In most cases, no primer is required. Physical properties will remain stable over time.

### Composition and Materials:

A/D FIREBARRIER Seal may be pumped or poured into the opening. A/D FIREBARRIER Seal NS (non-slumping) is designed for trowel and spray applications.

A/D FIREBARRIER Seal and Seal NS contain water and must be protected from freezing and from water until fully cured. Store, transport and install at temperatures above 40°F (5°C).

**Colors:** A/D FIREBARRIER Seal is blue in color. Seal NS is available in white or red – please specify when ordering. The white version of Seal NS in 5 gal (18.9 L) pails may be tinted in the field with a variety of color tint pastes. Refer to Seal NS *Tinting* data sheet.

**Packaging:** A/D FIREBARRIER Seal and Seal NS are available in 5 US gallon (18.9 L) pails. Theoretical coverage per pail is 40 ft<sup>2</sup> (3.8 m<sup>2</sup>) at an applied wet film thickness of 0.2 in. (5 mm) and approximately 64 ft<sup>2</sup> (5.7 m<sup>2</sup>) at 1/8-in. (3 mm) wet thickness. Seal NS is also available in 10.3 fl. oz. (304mL) and 28.7 fl. oz. (850 mL) tubes.

### Application Limitations:

- Do not install when ambient temperature or temperature of substrate is below 40°F (5°C).
- Protect from freezing and water until sealant is fully cured.

Table 1 - PHYSICAL PROPERTIES		
Property	Result	
	Seal	Seal NS
Uncured		
Color	blue	white or red
VOC (ASTM D3960)	0.2 lb/gal US (26 g/L)	0.23 lb/gal US (27 g/L)
% Volatile by volume (ASTM D2697)	43.0	41.9
Tack Free Time*, hours	4	1
Curing Time*, hours	24 – 96	
Brookfield Viscosity (nominal), centipoises	10,000 (LVF, spindle 4 @ 5 rpm)	200,000 (RVT, spindle E @ 10 rpm)
pH	9.1	8.5 – 8.8
Weight per Gallon, lb / imp. gal.	13.5	
Cured		
Color	blue	white or red
Dirt Resistance	Excellent	
Tensile Strength (ASTM D412), psi		330 – 365
Tensile Strength (ASTM D2370), psi	385	
Elongation at break (ASTM D412), %		255 – 350
Elongation at break (ASTM D2370), %	370	
* Curing time will vary with temperature, humidity and thickness.		
Values given above are not intended for specification preparation.		

- Do not install to surfaces with special protective or cosmetic coatings without prior consultation with manufacturer and first testing adhesion.
- Do not install where direct contact with food will occur.
- Do not install where abrasion or physical abuse is anticipated.
- Seal is intended for horizontal applications only. Seal NS can be used for vertical and horizontal applications.
- Seal and Seal NS have been tested in numerous firestop joint and through-penetration firestop systems. For best economy and performance the product should be applied to a thickness equal to or slightly greater than the minimum test design thickness. Excessive depth to width ratios may cause sealant failure – **do not apply excessive thickness.** As a guideline, we recommend that the minimum

test system thicknesses not be exceeded by more than 25%.

**Standards:** A/D FIREBARRIER Seal and Seal NS have been fire tested in accordance with the following: ULC-S115-M, "Standard Method of Fire Tests of Firestop Systems", ASTM E814-83 and ANSI/UL 1479, "Standard Method of Fire Tests of Through - Penetration Fire Stops and ANSI/UL 2079, "Tests for Fire Resistance of Building Joint Systems."

## 3. TECHNICAL DATA

A/D FIREBARRIER Seal and Seal NS are listed by ULC, ULI, ITS and FM. For details of rated firestop systems see ULI' s Fire Resistance Directory, Volume 2, ULC' s List of Equipment and Materials, Firestop Systems and Components, ITS' s Listings Book and FM' s Approval Guide.

**ULC:** JF9, -29, -50, -51, -93, -99 and -100. HW36, -38, -39, -40, -41, -42, -43, -44, -45, -46, -47, -48, -49, -50, -51, -52, -53, -54,

-55 and -56.  
 SP218, -219, -220, -221, -759,  
 -761, -881, -882 and -1080.

**ULI:** CAJ-1125, -1127, -1324 and -1450. FF-D-1032 and -1038. FW-D-1029 and -1036.

HW-D-0060, -0061, -0118, -0119, -0120, -0247, -0249, -0250, -0254, -0282, -0301, -0302, -0303, -1012, -1020 and -1029. WW-D-1033.

**FM:** 90, 93, 95.

**ITS:** AD/PH 180-01, -02 and -03.

AD/PHV 120-01, -02 and -03,  
 180-09, -10, -11 and -12.

#### 4. INSTALLATION

Clean all openings to be firestopped by removal of foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants, glazing compounds, protective coatings etc.

Cleaning of all surfaces should be done on the same day in which the sealant is applied.

**Priming:** A/D FIREBARRIER Seal and Seal NS generally do not require priming. In view of the unpredictability of surface characteristics, it is recommended that a test sample of sealant be applied on the surface to test adhesion.

**Masking:** Areas adjacent to openings to be firestopped can be masked to assure a neat appearance. The masking tape should not be allowed to touch the clean surface to which the seal is to adhere. Remove masking tape immediately.

A/D FIREBARRIER Mineral Wool is the required backup material for firestops.

Install backup materials as specified.

**A/D FIREBARRIER Seal** is intended only for horizontal

Hoses	300 ft max. 50ft of 3/8 in. dia. & 250 ft of 1/4 in. dia.
Whip line	9 ft whip line with swivel
Tips	5/17 heavy-duty self cleaning reversible type
Spray machine	Airless sprayer capable of 3000psi pressure and min. delivery of 1.0 gpm without surging
Filters	60-80 mesh in gun & 60-80 in manifold
Mixing	Heavy-duty drill with paddle for 2 min.
Application Rate	1/8 in. (3 mm) wet
Finish	Follows profile of backer material
Trowel	May be troweled
Clean-up	10 gal water

applications. Check fire test design for required thickness - usually 0.2 in. (5 mm) wet. Pour or pump Seal in a continuous operation to fill and seal the opening. A light pass with a trowel over the surface of the seal will ensure a smooth surface.

**A/D FIREBARRIER Seal NS** is non-slumping and may be sprayed or trowelled for vertical and / or horizontal applications. For spray applications refer to Table 2. Check fire test design for required minimum wet film thickness - usually 0.2 in. (5 mm) or 1/8 in. (3.2 mm).

Excess sealant should be wiped from glass, metal and plastic surfaces while uncured. Clean up is with water.

**CURED SEALANT IS USUALLY VERY DIFFICULT TO REMOVE WITHOUT ALTERING OR DAMAGING THE SURFACE TO WHICH THE SEALANT HAS BEEN APPLIED.**

**Precaution:** May cause irritation. May be harmful if swallowed. Avoid getting in eyes. Wash hands

thoroughly after handling. Use only as directed.

**Keep out of reach of children.**

To safely use this product, read and abide by Material Safety Data Sheet (MSDS).

**Shelf Life:** When stored at or below 80°F (27°C) and above 40°F (5°C), A/D FIREBARRIER Seal and Seal NS have a shelf life of one year from date of manufacture.

**Note:** Protect from freezing.

#### 5. AVAILABILITY AND COST

**Availability:** A/D sales offices and technical representatives are located throughout North America. (See below)

#### 6. MAINTENANCE

No maintenance should be required. If seal becomes damaged, replace damaged portion. Clean surfaces in damaged area and repair with fresh A/D FIRE-BARRIER Seal or Seal NS. Damage by other trades should be patched at the expense of trade causing damage.

#### 7. TECHNICAL SERVICES

Contact nearest A/D office.



### A/D FIRE PROTECTION SYSTEMS

Head Office: 420 Tapscott Road, Scarborough, Ontario, M1B 1Y4  
 Tel: (800) 263-4087 or (416) 292-2361 Fax: (416) 298-5887

[www.adfire.com](http://www.adfire.com)

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