

Frequently Asked Questions on Elastomeric Sealants

What Do I use?

What are the substrates?

• Base of both materials

What is the environment?

- Location
- Interior/Exterior
- Direct/Indirect UV
- Marine or coastal location
- Will you be painting it?

What are you trying to achieve? (or maybe, what do you want to achieve)

Where do I find details on your products?

At www.soudal.co.nz, on www.masterspec.co.nz (CBI#4811SG)

Why is your Gorilla MS Sealant better than other Gorilla products?

BRANZ Appraised (#419) for E2/AS1 Weather tightness, "AgriQuality" for use in Dairy (Food Safe) locations, can be used as a "Non-Dairy Maintenance Applications". Has very high UV stability to meet the durability requirements of the NZ Building Code (B2.3.1 15 years). It also has a serviceable life of up to 50years if used in dry environments where the product is inaccessible and completely sheltered from temperature extremes and excessive movement. High Marine Salts resistance

Why would I choose to use the Gorilla Façade 20LM for my jointing?

If I was looking for an exterior sealant for a more industrial building, where I needed 10 years durability for the product and I knew that I could ensure there was a paint coating over every joint. I may also need a slightly higher level of possible chemical resistance that many MS Polymers normally offer.

Why is your Gorilla Firestop MS suitable for Fire Rated Joints?

Complies with AS1530.4-2005. It has a 25% movement capability in a construction joint. AgriQuality for use in Dairy (Food Safe) locations, has very high UV stability, does not need to be painted to protect it from NZ UV conditions. It also has a serviceable life of up to 50 years if used in dry environments where the product is inaccessible and completely sheltered from temperature extremes and excessive movement. High Marine Salts resistance

Why do Soudal have both Dairy and Non-Dairy Certificates?

The reason that Soudal Ltd went and got the Non-Dairy Maintenance product was so that we could get it on the approved list of products for maintenance works at a number of processing facilities (meat processing, other processing, laboratories & pharmaceutical) after the last big China vs MPI scare in the meat industry.

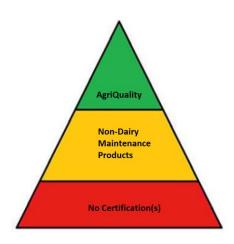
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Prepared: 16 July 2019 Prepared by: Steve Loveridge



What this means is that some items that Soudal sells are both approved for "Food Prep" areas and also in "Non-Dairy" areas.

In the (simplified) hierarchy of certification for products used in food (human/animal) processing construction and maintenance the pinnacle is AgriQuality, followed by the Non-Dairy Maintenance products and finally those products that have no certification.



Can these Sealants be painted?

Polyurethane & MS Polymers can all be painted with

Water Base paint coatings. Polyurethane sealants all require painting to enhance their UV resistance under NZ conditions. MS Polymers don't require painting as they already have a very high UV resistance for NZ conditions. Silicones do not take a paint coating.

Can I use Silicones for Exterior Jointing?

Yes, however it needs to be remembered that the joints cannot be painted, and that the Gorilla Plumbers Silicone is BRANZ Appraised for BRANZ Appraised (#844) for E2/AS1 Weather tightness, AgriQuality for use in Dairy (Food Safe) locations, can be used as a Non-Dairy Maintenance applications. Has very high UV stability to meet the durability requirements of the NZ Building Code (B2.3.1 15 years).

So these are Sealants are Primerless?

In many cases Yes, however that leaves an element of risk to the project that may be considered unacceptable. To eliminate that risk, Soudal recommends the use of "Adhesion Promoters" to remove that potential risk for adhesive failure to the substrate for both Porous & Non-Porous surfaces/substrates.

So what Adhesion Promoters should be used?

Porous Surfaces Gorilla Primer 150 for MS Polymers

Gorilla Primer 100 for Gorilla Façade 20LM

Non-Porous Surfaces Gorilla 696 Surface Activator

Gorilla Solvent Cleaner

Do I need to be careful when using the "Adhesion Promoters"?

Only as far as you have to be with any chemical based product, Soudal recommend that you should always refer to the Technical & Safety Data Sheets.

Points to note are:

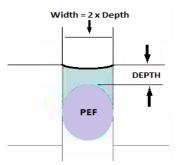
If using either Gorilla Primer 150 or Gorilla Primer 100 you should ensure that they are only
used on Porous surfaces, and that if previous primers have been used then these need to be
removed prior to application.



If using on non-porous, especially powder-coated Surfaces, then always test in a small obscure
area first to ensure that the product does not change the colour look of the powder coating.
 In fact, this applies also to many exterior claddings used. Most Exterior Cladding
Manufacturers have very specific requirements about what can be used to prepare the
surfaces.

How should an elastomeric exterior joint be designed for both weather-tightness and durability?

- The ideal width of the joint is subject to the expansion and contraction of the substrates that they are connected to.
- Design of the joint is always for 2-Point Adhesion, <u>NEVER</u> 3-Point Adhesion.



Why is the expansion and contraction of the substrates so important?

If the expansion & contraction of the materials is greater that the allowance for potential movement, then under stress the joint may pull itself apart, leading to:

- Adhesive failure from the substrate base
- Cohesive failure splitting within its own structure
- Surface Distortion The strength of the bond, and the forces encountered, cause the substrate to bend and misshapen.

Why do some joints on ACM Panel constructions look ripped and misshapen?

Firstly, this is not limited to ACM Panel Construction but can happen to any joint in any cladding type where the expansion & contraction of a material is greater than the design limits of the joints. The cause of the issue is **early joint movement during sealant cure cycle.** This is where joint movement is caused by **extreme temperature swings** that has occurred during the initial sealant cure cycle and has caused surface wrinkling and/or cracking leading to cohesive sealant failures, due to the partially cured state of the sealant not being strong and durable enough to cope with the movement of the substrate.

