

17 August 2021
Document ID: 539153Glasscorp Limited
North Harbour Industrial Estate
124 Bush Road, Albany 0632
Auckland, New ZealandProject Name: 20-011556 - General Testing - **Marshall SUPER-STICK**
Project Address: 124 Bush Road, Albany, Auckland, New Zealand
Sample Test Name: **Marshall SUPER-STICK****Ref: ADHESION Test Report for General Testing - Marshall SUPER-STICK**

The Dow construction laboratory has completed the adhesion testing in support of your above referenced project. The adhesion tests are performed in accordance to the Modified ASTM C794. A summary of this laboratory testing evaluation and application recommendations is given below.

Sample Number 205345		Substrate Details	
Substrate Type		Membrane - Flashing or Roofing	
Substrate Mnf Name / Supplier Name		Marshall Innovations	
Substrate Description		Flashing Tape - 78mm Wide x 1000mm Long	
Surface To Test		Uniform Marked Surface	
Cleaner		Isopropanol	
Sealant	Primer	Application Recommendation	
DOWSIL™ 121 Structural Glazing Sealant	DOWSIL™ 1200 OS Primer	Approved for Structural Applications	
DOWSIL™ 688 Glazing & Cladding Silicone Sealant	No Primer	Approved for Weatherseal Applications	
DOWSIL™ 688 Glazing & Cladding Silicone Sealant	DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications	
DOWSIL™ 790 Silicone Building Sealant	DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications	
DOWSIL™ 791 Silicone Weatherproofing Sealant	No Primer	Approved for Weatherseal Applications	
DOWSIL™ 791 Silicone Weatherproofing Sealant	DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications	
DOWSIL™ 795 Structural Glazing Sealant	No Primer	Approved for Structural Applications	
DOWSIL™ 795 Structural Glazing Sealant	DOWSIL™ 1200 OS Primer	Approved for Structural Applications	

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Sample Number 207428		Substrate Details	
Substrate Type		Membrane - Flashing or Roofing	
Substrate Mnf Name / Supplier Name		Marshall Innovations	
Substrate Description		Flashing Tape - 78mm Wide x 1000mm Long	
Surface To Test		Uniform Marked Surface	
Cleaner		White Spirit	
Sealant		Primer	Application Recommendation
DOWSIL™ 121 Structural Glazing Sealant		DOWSIL™ 1200 OS Primer	Approved for Structural Applications
DOWSIL™ 688 Glazing & Cladding Silicone Sealant		No Primer	Approved for Weatherseal Applications
DOWSIL™ 688 Glazing & Cladding Silicone Sealant		DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications
DOWSIL™ 790 Silicone Building Sealant		DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications
DOWSIL™ 791 Silicone Weatherproofing Sealant		No Primer	Approved for Weatherseal Applications
DOWSIL™ 791 Silicone Weatherproofing Sealant		DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications
DOWSIL™ 795 Structural Glazing Sealant		No Primer	Approved for Structural Applications
DOWSIL™ 795 Structural Glazing Sealant		DOWSIL™ 1200 OS Primer	Approved for Structural Applications

Sample Number 207711		Substrate Details	
Substrate Type		Membrane - Flashing or Roofing	
Substrate Mnf Name / Supplier Name		Marshall Innovations	
Substrate Description		Flashing Tape - 78mm Wide x 1000mm Long	
Surface To Test		Uniform Marked Surface	
Cleaner		No Cleaning - Dry Cloth Wipe	
Sealant		Primer	Application Recommendation
DOWSIL™ 121 Structural Glazing Sealant		DOWSIL™ 1200 OS Primer	Approved for Structural Applications
DOWSIL™ 688 Glazing & Cladding Silicone Sealant		No Primer	Approved for Weatherseal Applications
DOWSIL™ 688 Glazing & Cladding Silicone Sealant		DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications
DOWSIL™ 790 Silicone Building Sealant		DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications



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DOWSIL™ 791 Silicone Weatherproofing Sealant	No Primer	Approved for Weatherseal Applications
DOWSIL™ 791 Silicone Weatherproofing Sealant	DOWSIL™ 1200 OS Primer	Approved for Weatherseal Applications
DOWSIL™ 795 Structural Glazing Sealant	No Primer	Approved for Structural Applications
DOWSIL™ 795 Structural Glazing Sealant	DOWSIL™ 1200 OS Primer	Approved for Structural Applications

The adhesion testing completed for DOWSIL™ 688 Glazing & Cladding Silicone Sealant was in the Black colour. Therefore the recommendations made in relation to this sealing product are only applicable to the pigmented systems of this material.

The testing completed indicates that the sealants tested achieved adequate adhesion to the abovementioned substrate, as per the application recommendation of "Approved for Weatherseal or Structural Applications". However please note that the ASTM C794 test only evaluates the adhesion characteristics of the sealants to the underlying substrate through laboratory testing and Dow assumes no responsibility or adequacy of those substrates. The manufacturer of the substrate also needs to be contacted to approve it for glazing applications and the overall long term performance.

Dow laboratory test results demonstrated that the Dow Silicone Sealants evaluated had excellent adhesion to the abovementioned substrate. However please note that some substrate failure was observed under stress. This means that the sealants adhered to the coating, but that the coating pulled away from the underlying material during testing. Dow recommends contacting the appropriate substrate manufacturer regarding its use in this application to ensure more stable coatings are produced for actual production runs. The referenced coating here is the aluminium foil on top to which the adhesion was evaluated.

The recommended site and/or factory glazing procedures need to be followed in application as outlined in the Asian Technical Manual which can be obtained through the local distributor or Dow direct.

Each cleaning and primer recommendation for use in weathersealing or structural applications is only valid when Dow has approved the glazing details, and has tested and approved all substrates and accessory materials that contact the weathersealant or structural sealant.

Each cleaning and primer recommendation for use in weathersealing or structural applications is only valid when the substrate samples tested are representative of those used for the project and this under sender's responsibility.

Surfaces that are cleaned and primed today must be sealed today; otherwise recleaning and repriming are required before application.



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The sealants tested were also found to be compatible with the abovementioned substrate with no sign of any discolouration or any other adverse effects.

The cleaning and priming recommendations are only valid for a period of 12 months, starting from the date of this letter (17 August 2021). If sealant glazing will commence more than 12 months after this report is issued, please submit additional samples for re-test.

It is recommended that regular jobsite adhesion testing be performed throughout the project to confirm that good adhesion is obtained consistently on actual job site substrates. Information and literature on field adhesion testing and Dow application procedures may be obtained by contacting your Dow distributor or customer service representative.

Application recommendations are based on Dow laboratory testing, evaluation and technical specifications.

This is a general test only and therefore testing will still be required on a regular project by project basis for warranty purposes.

These recommendations need to be considered in conjunction with all other reports completed for the abovementioned substrate.

For further information regarding these test results, please contact your Dow Construction Field Specialist, Vic Ostic, on (+61) (0) 419 279 273 at Sydney, New South Wales, Australia. E-Mail: vic.ostic@dow.com

Sincerely
The Dow Chemical Company

Vic Ostic
Sales Application Engineer

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124 Bush Road, Albany 0632
Auckland, New Zealand

Project Name: 20-011556 - General Testing - **Marshall SUPER-STICK**
Project Address: 124 Bush Road, Albany, Auckland, New Zealand
Sample Test Name: **Marshall SUPER-STICK**

Ref: COMPATIBILITY Test Report for General Testing - Marshall SUPER-STICK

The Dow construction laboratory has completed the compatibility testing in support of your above referenced project. The compatibility tests are performed in accordance to the Modified ASTM C1087. A summary of this laboratory testing / evaluation and application recommendations is given below.

Sample Number 205344	Substrate Details
Substrate Type	Membrane - Flashing or Roofing
Substrate Mnf Name / Supplier Name	Marshall Innovations
Substrate Description	Flashing Tape - 78mm Wide x 1000mm Long
Surface To Test	Uniform Marked Surface
Sealant	Application Recommendation
DOWSIL™ 121 Structural Glazing Sealant	Approved for Contact in Structural Applications
DOWSIL™ 688 Glazing & Cladding Silicone Sealant	Approved for Contact in Weatherseal Applications
DOWSIL™ 790 Silicone Building Sealant	Approved for Contact in Weatherseal Applications
DOWSIL™ 791 Silicone Weatherproofing Sealant	Approved for Contact in Weatherseal Applications
DOWSIL™ 795 Structural Glazing Sealant	Approved for Contact in Structural Applications

The results of the compatibility testing are only valid as long as the supplier certifies that neither the formulation nor manufacturing process for these materials has been changed.

For weathersealing and structural applications, the results of the compatibility testing are only valid when Dow has approved the glazing details, and has tested and approved all substrates and accessory materials that contact the silicone sealant evaluated.

Application recommendations are based on Dow laboratory testing, evaluation and technical specifications.



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These recommendations need to be considered in conjunction with all other reports completed for the abovementioned substrate.

This is a general test only and therefore testing will still be required on a regular project by project basis for warranty purposes.

For further information regarding these test results, please contact your Dow Construction Field Specialist, Vic Ostic, on (+61) (0) 419 279 273 at Sydney, New South Wales, Australia. E-Mail: vic.ostic@dow.com

Sincerely
The Dow Chemical Company

Vic Ostic
Sales Application Engineer