

**Technical Service** Communication

Result.

Pass/Fail

Date: 1/22/2021

Attn: To Whom It May Concern Sto Corp.

Ref<sup>.</sup> Pecora Sealant Adhesion Evaluation / Sto Coatings and Flashing

### Tracking #824097

The Technical Service Group has evaluated the peel adhesion properties of various Pecora joint sealants on the Sto coatings and flashing materials provided directly by Sto Corp. All testing was performed in accordance with ASTM C794 test procedures. Sealants were applied to the fully cured fluid applied membranes applied over an exterior grade sheathing as provided by Sto Corp.

Surface preparation performed on each substrate is noted in the table below. All peel adhesion testing was performed with and without the use of sealant primers. Primer is reported and required on samples that failed to meet the C794 pass criteria without primer. Otherwise, the acceptable test result without primer is reported. No water immersion was performed as an exterior gypsum sheathing with a raw edge was utilized as the substrate. \*\*\*ASTM C794 Pass Criteria: ≥5.0pli, <25% adhesive sealant failure\*\*\*

Substrates evaluated:

- Sto Gold Coat (New) Liquid Air Barrier
- Sto Gold Coat (Old) Liquid Air Barrier
- Sto VaporSeal Liquid Air Barrier •
- Sto AirSeal Liquid Air Barrier •
- Sto RapidGuard Liquid Flashing

## Sealants evaluated:

- Pecora 890NST Architectural Silicone Sealant
- Pecora 890FTS Field Tintable Silicone Sealant •
- Pecora AVB Air & Vapor Barrier Silicone Sealant •
- Pecora Dynatrol I-XL STPU Hybrid Sealant •
- Pecora Dynatrol I-XL STPU Field Tintable Hybrid Sealant

## Peel Adhesion Testing (ASTM C794)

- Required AVG Peel Adhesive Surface Substrate Pecora Sealant Preparation Primer Strength, pli Failure, % 890NST Silicone IPA wipe None 28.9 890FTS Silicone IPA wipe None 17.0 AVB Silicone 24.0 IPA wipe None **Dynatrol I-XL** 27.9 IPA wipe None Hybrid **Dynatrol I-XL** IPA wipe P-150 >9.01
- 0 Pass 0 Pass 0 Pass Sto Gold Coat (Old) 0 Pass 0 Pass Hybrid FTH 890NST Silicone IPA wipe P-120 29.3 0 Pass 890FTS Silicone P-120 IPA wipe 30.1 0 Pass 0 **AVB Silicone** IPA wipe None 13.7 Pass Sto Gold Coat (New) **Dynatrol I-XL** IPA wipe P-120 >7.21 0 Pass Hybrid **Dynatrol I-XL** IPA wipe P-120 >6.21 0 Pass Hybrid FTH P-120 28.3 0 Pass 890NST Silicone IPA wipe 890FTS Silicone IPA wipe None 23.1 0 Pass AVB Silicone 0 Pass IPA wipe 26.1 None Sto VaporSeal **Dvnatrol I-XL** IPA wipe P-120 19.9 0 Pass Hybrid **Dynatrol I-XL** IPA wipe P-120 17.6 0 Pass Hybrid FTH











- Sto BTS Xtra EIFS Coating
- Sto BTS Plus EIFS Coating
- Sto PA EIFS Coating
- Sto PA-B EIFS Coating
- Sto Armat Classic Plus EIFS Coating



# Peel Adhesion Testing (ASTM C794) cont.

Substrate	Pecora Sealant	Surface Preparation	Required Primer	AVG Peel Strength, pli	Adhesive Failure, %	Result, Pass/Fail
Sto AirSeal	890NST Silicone	IPA wipe	P-120	35.2	0	Pass
	890FTS Silicone	IPA wipe	P-120	26.4	0	Pass
	AVB Silicone	IPA wipe	None	24.6	0	Pass
	Dynatrol I-XL Hybrid	IPA wipe	P-120	>8.0 <sup>1</sup>	0	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	None	>6.1 <sup>1</sup>	0	Pass
Sto RapidGuard	890NST Silicone	IPA wipe	N/A	N/A	N/A	Fail <sup>2</sup>
	890FTS Silicone	IPA wipe	P-225	5.7	100	Fail
	AVB Silicone	IPA wipe	None	19.5	95	Fail
	Dynatrol I-XL Hybrid	IPA wipe	None	24.9	0	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	None	27.0	0	Pass
Sto BTS Xtra	890NST Silicone	IPA wipe	P-150	25.6	10	Pass
	890FTS Silicone	IPA wipe	P-150	18.5	50	Pass
	AVB Silicone	IPA wipe	None	24.7	0	Pass
	Dynatrol I-XL Hybrid	IPA wipe	P-120	13.8	20	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	P-120	>13.1 <sup>1</sup>	0	Pass
Sto BTS Plus	890NST Silicone	IPA wipe	P-150	27.9	0	Pass
	890FTS Silicone	IPA wipe	P-120	14.6	20	Pass
	AVB Silicone	IPA wipe	None	16.5	0	Pass
	Dynatrol I-XL Hybrid	IPA wipe	None	>8.71	0	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	None	>5.0 <sup>1</sup>	0	Pass
Sto PA-B	890NST Silicone	IPA wipe	P-150	20.5	0	Pass
	890FTS Silicone	IPA wipe	P-120	24.5	0	Pass
	AVB Silicone	IPA wipe	None	24.8	0	Pass
	Dynatrol I-XL Hybrid	IPA wipe	None	>8.71	0	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	None	>5.5 <sup>1</sup>	0	Pass
Sto PA	890NST Silicone	IPA wipe	P-225	27.8	0	Pass
	890FTS Silicone	IPA wipe	P-120	27.3	0	Pass
	AVB Silicone	IPA wipe	None	17.3	0	Pass
	Dynatrol I-XL Hybrid	IPA wipe	None	28.0	0	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	None	24.8	0	Pass













## Peel Adhesion Testing (ASTM C794) cont.

Substrate	Pecora Sealant	Surface Preparation	Required Primer	AVG Peel Strength, pli	Adhesive Failure, %	Result, Pass/Fail
Sto Armat Classic Plus	890NST Silicone	IPA wipe	None	23.8	0	Pass
	890FTS Silicone	IPA wipe	None	19.5	0	Pass
	AVB Silicone	IPA wipe	None	15.8	0	Pass
	Dynatrol I-XL Hybrid	IPA wipe	None	19.6	0	Pass
	Dynatrol I-XL Hybrid FTH	IPA wipe	None	17.3	0	Pass

<sup>1</sup> Substrate failure. Paper facer pulled away from gypsum core.

<sup>2</sup> No adhesion possible with all primers tested.

### Conclusion:

- All sealants evaluated exhibited passing results per ASTM C794 criteria with the exception of the silicone-based sealants applied to the RapidGuard liquid flashing. Greater than 25% adhesive sealant failure was observed and therefore sealant recommendations on the RapidGuard are limited to the STPU-based sealants: Dynatrol I-XL Hybrid and Dynatrol I-XL Hybrid FTH (Field Tintable Hybrid).
- Sealant primer is required where listed.

Should you have any questions concerning the test methods employed or the results reported here please contact the Pecora Technical Service Dept.

Sincerely, Miche DYM

Michael D. Murphy Sr. Technical Service Representative

Pc: Ron Petsch, Pecora Corp.

