



TEST No.: BR0130
Test Standard: ASTM F3016-19
Company: SBI Industrial
Model: X-Frame
Product Rating: P2

8/31/22

To whom it may concern:

This letter is to certify that the X-Frame provided by SBI Industrial was tested to the requirements of the ASTM standard F3016-19. This was the standardized test method for low speed (30mph and lower) dynamic crash testing using a surrogate test vehicle for perimeter barrier crash testing at the time the test was performed.

Testing was performed at the Calspan Corporation, on August 31, 2022. The X-Frame was impacted by a surrogate test vehicle (STV) weighing 2274.5 kg (5014.4 lbs.) travelling at 22.4 mph [36.0 kph]. Post-test measurements of the maximum dynamic penetration into the protected area as measured from the reference line of the test article, found the test article to have the greatest intrusion. The test article was measured as having a maximum intrusion of 18.4" [467.4mm] behind the trailing edge (reference line) of the impacted test article. As such, based on the surrogate test vehicle's mass, impact velocity and measured penetration into the protected area, the test article was given a penetration rating P2 as allowed by the standard

Calspan is accredited to ISO/IEC 17025:2017 to perform ASTM F3016-19 testing by Perry Johnson Laboratories Accreditation, Inc. (PJLA) under Certificate Number L20-602-R1 and Accreditation Number 76654.

Respectfully,

A handwritten signature in blue ink that reads "David Casey".

David Casey
Test Director
Calspan Barrier Test
716.631.4105
David.casey@calspan.com

Safer Highways...Safer Skies



TEST No.: BR0131
Test Standard: ASTM F3016-19
Company: SBI Industrial
Model: 5" Square with Stiffener
Product Rating: P2

9/7/22

To whom it may concern:

This letter is to certify that the 5" Square with Stiffener provided by SBI Industrial was tested to the requirements of the ASTM standard F3016-19. This was the standardized test method for low speed (30mph and lower) dynamic crash testing using a surrogate test vehicle for perimeter barrier crash testing at the time the test was performed.

Testing was performed at the Calspan Corporation, on August 31, 2022. The 5" Square with Stiffener was impacted by a surrogate test vehicle (STV) weighing 2274.5 kg (5014.4 lbs.) travelling at 22.4 mph [36.0 kph]. Post-test measurements of the maximum dynamic penetration into the protected area as measured from the reference line of the test article, found the surrogate test vehicle to have the greatest intrusion. The surrogate test vehicle was measured as having a maximum intrusion of 38.5" [977.9mm] behind the trailing edge (reference line) of the impacted test article. As such, based on the surrogate test vehicle's mass, impact velocity and measured penetration into the protected area, the test article was given a penetration rating P2 as allowed by the standard

Calspan is accredited to ISO/IEC 17025:2017 to perform ASTM F3016-19 testing by Perry Johnson Laboratories Accreditation, Inc. (PJLA) under Certificate Number L20-602-R1 and Accreditation Number 76654.

Respectfully,

A handwritten signature in blue ink that reads "David Casey".

David Casey
Test Director
Calspan Barrier Test
716.631.4105
David.casey@calspan.com

Safer Highways...Safer Skies



TEST No.: BR0132
Test Standard: ASTM F3016-19
Company: SBI Industrial
Model: 4.5" Round Pipe with I-Beam Stiffener
Product Rating: P2

9/1/22

To whom it may concern:

This letter is to certify that the 4.5" Round Pipe with I-Beam Stiffener provided by SBI Industrial was tested to the requirements of the ASTM standard F3016-19. This was the standardized test method for low speed (30mph and lower) dynamic crash testing using a surrogate test vehicle for perimeter barrier crash testing at the time the test was performed.

Testing was performed at the Calspan Corporation, on September 1, 2022. The 4.5" Round Pipe with I-Beam Stiffener was impacted by a surrogate test vehicle (STV) weighing 2274.5 kg (5014.4 lbs.) travelling at 21.8 mph [35.1 kph]. Post-test measurements of the maximum dynamic penetration into the protected area as measured from the reference line of the test article, found the surrogate test vehicle to have the greatest intrusion. The surrogate test vehicle was measured as having a maximum intrusion of 20.5" [520.7mm] behind the trailing edge (reference line) of the impacted test article. As such, based on the surrogate test vehicle's mass, impact velocity and measured penetration into the protected area, the test article was given a penetration rating P2 as allowed by the standard

Calspan is accredited to ISO/IEC 17025:2017 to perform ASTM F3016-19 testing by Perry Johnson Laboratories Accreditation, Inc. (PJLA) under Certificate Number L20-602-R1 and Accreditation Number 76654.

Respectfully,

A handwritten signature in blue ink that reads "David Casey".

David Casey
Test Director
Calspan Barrier Test
716.631.4105
David.casey@calspan.com

Safer Highways...Safer Skies