

ASTM 7208 RESULTS

SCIENCE/PHYSICS/MATH



ASTM 7208 STRAW BALE



Increased Ponding, Start Overtopping, Increased Underflow

ASTM 7208 RESULTS ROCK CHECK DAM

SCIENCE/PHYSICS/MATH



ASTM 7208 ROCK CHECK DAM



ASTM 7208 RESULTS FILTER SOCK

SCIENCE/PHYSICS/MATH



ASTM 7208 FILTER SOCK



ASTM 7208 RESULTS SILT FENCE

SCIENCE/PHYSICS/MATH



ASTM 7208 SILT FENCE



Increased Ponding & Very Near Overtopping

WHAT TYPES OF DEVICES ARE TESTED?

14" STRAW BALES

9" COMPOST SOCK

15" ROCK CHECK DAM

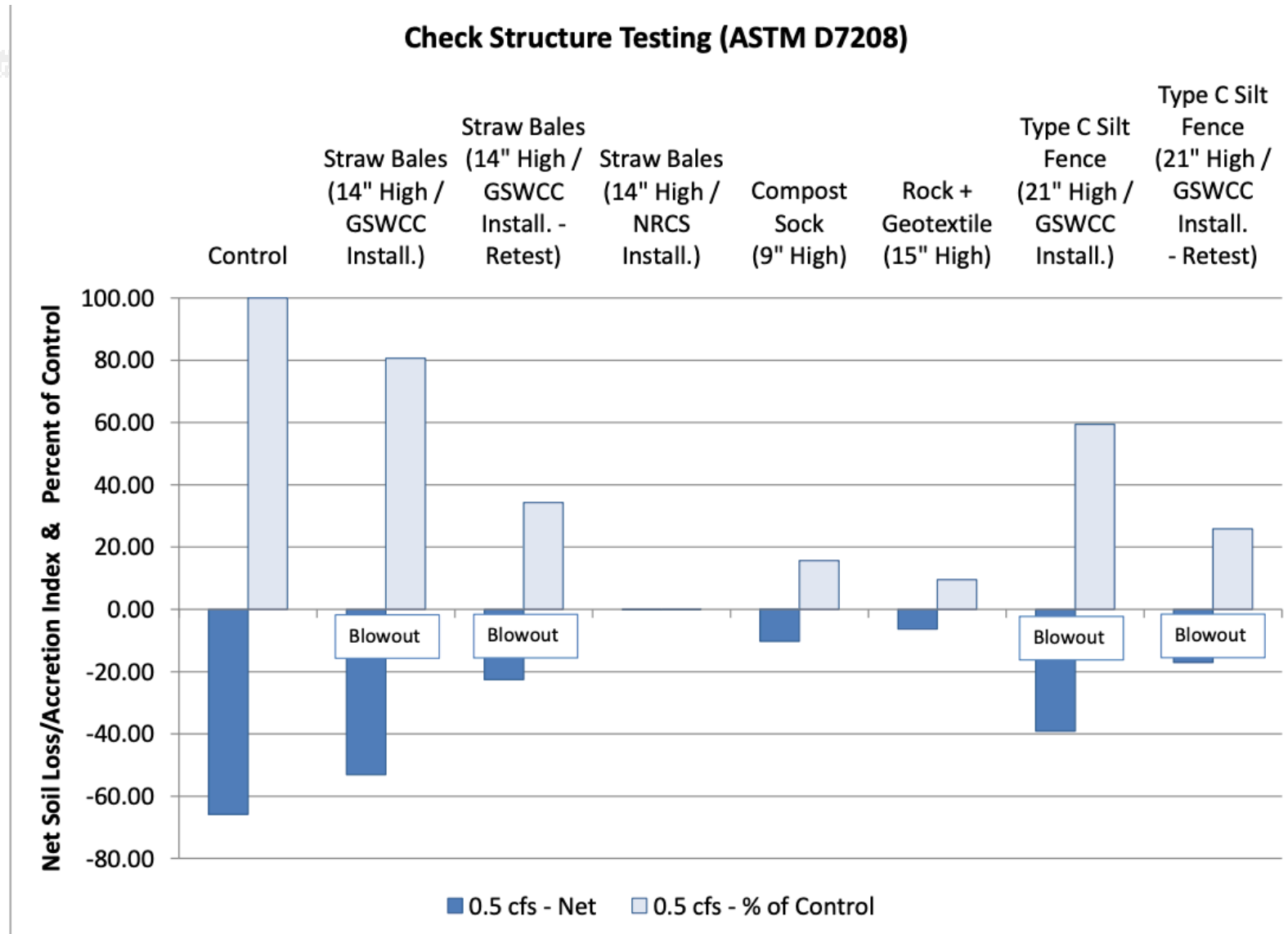


Figure 25. Summary of All 0.5cfs Tests

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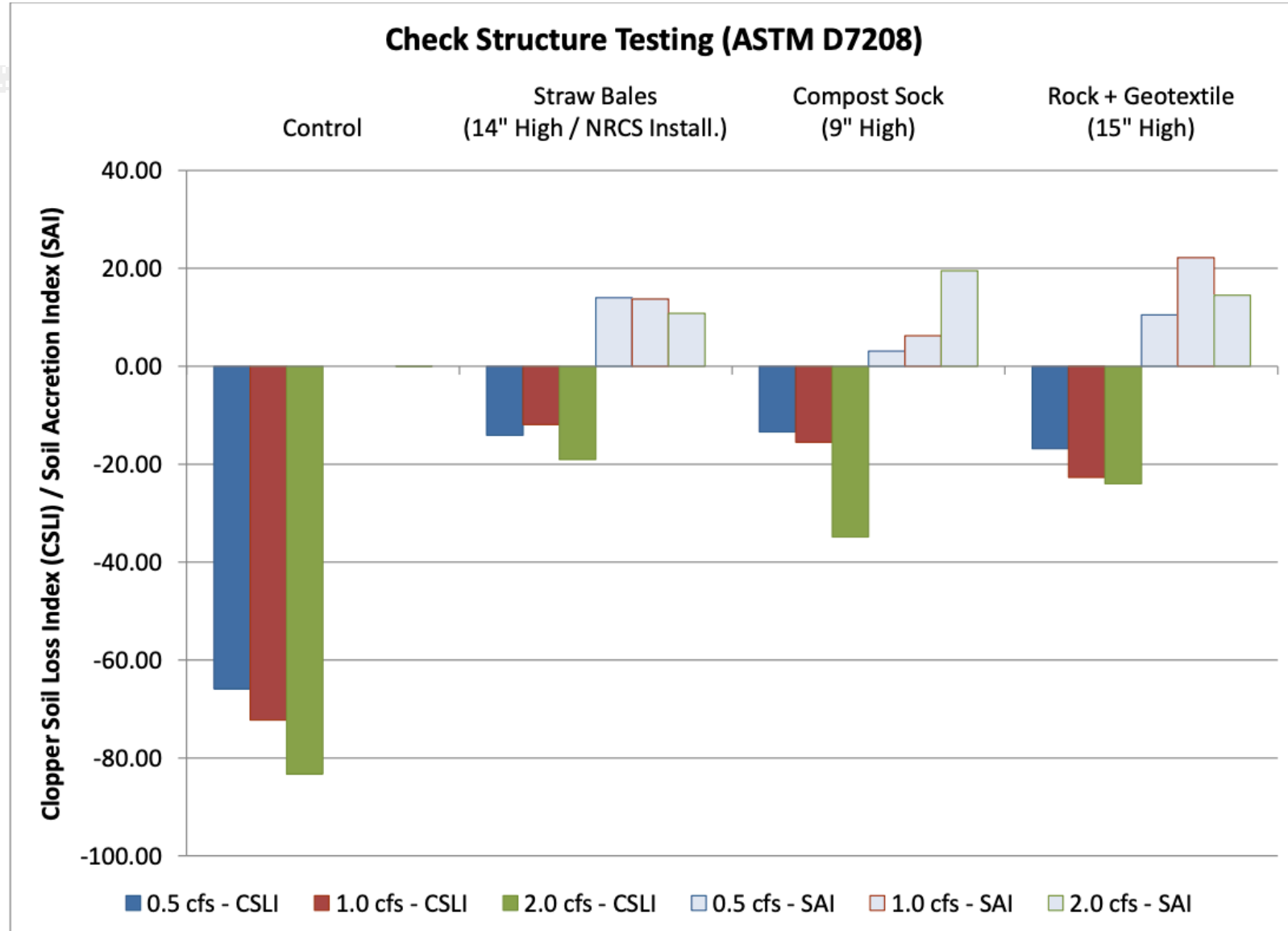


Figure 26. Net Soil Loss/Accretion & Percent of Control

THE ANSWERS TO THE 7208 TEST (OPEN BOOK)

SCIENCE/PHYSICS/MATH

- WHAT TYPE OF DEVICE WILL CAPTURE THE MOST SEDIMENT IN A DITCH CHECK APPLICATION?
- WHAT IS MY APPLICATION?
- IS THIS A PERMANENT OR TEMPORARY STRUCTURE?
- IS THE DEVICE APPLICABLE?
- IS THERE A BETTER TOOL FOR THE JOB?

ASTM 7351

IS THERE A CLEAR/CUT WINNER FOR THIS DESIGN?

WHAT ASTM TESTING STANDARDS APPLY TO SEDIMENT CONTROL?

ASTM 7351

Standard Test Method for Determining the ability of a soil retention device caused by sheet flow in full scale conditions

Used for assessment of Installation techniques

Used for “non-concentrated” flow separation determinations

Applies to toe of slope applications in regards to sheet flow

Uses Sediment Retention Percentages

Determination of Effectiveness in Sheet Flow Application

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THE ANSWERS TO THE 7351 TEST

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ASTM 5141



REMEMBER

ASTM 7351

- Is a method that Most represents:
 - Large Scale Testing
 - Overhead Rain simulation
 - Tests the System instead of a small sample
 - Important for the overall Success on a large Scale

ASTM 5141

- Tests the small Sample
- Test Flow through Rates
- Tests Filtration Capabilities
- Important for the design characteristics of devices

MOVIE TIME

IS THE TESTING RELEVANT?

- Compare the test results to your field results
- Apply Science Physics and Math in the field
- Apply technology advances to your design and inspections

- 7351 Results for Standard Fencing: 27%
- 7351 Results for Wire-backed Fencing: 53%
- 7351 Results for Rolled Devices: Range from 55%-98%
- How can we be cost effective and achieve the best results?



ASTM 7351 DEVICE RESULTS

CONCLUSIVE EVIDENCE:

- Manufacturers are often not providing data to support their sediment filtration claims instead of their retention results.
- The data that some provide is flawed.
- It is important to require documentation for the products you are specifying/designing/ or purchasing.
- There is a standardized test that you can require for sediment barriers. ASTM 7351
- With these truths lined up, why shouldn't you expect the manufacturers of SRDs to publish those ASTM D7351 test results?

- At what point should the industry make the minimum baseline standards for installed sediment barriers ASTM 7351
- We can't answer all of these questions for you, but we hope we have provided you with enough concrete information to do your own deciding.

IN THE FIELD VS. ON PAPER?

AGE OLD DESIGNER VS CONSTRUCTOR CONFLICT:



- The engineer: The axels are not designed to carry 3000 lbs”
- The Manufacturer: “The Car CAN Carry 3000lbs”
- The Constructor: “I can make it work”
- The End Result: Broken Axels, Destroyed car, Bricks that got laid, and a constructor that got paid



WHAT IS OUR PURPOSE?

As Engineers, Inspectors, and Constructors

ALPINE SKI HOUSE





SAY WHEN

THANK YOU

WWW.SILTWORM.COM

 Joe Moore

 219.488.7240

 jmoore@siltworm.com