

Agenda

- Testing Overview
 - Explanation of Compression Strength Testing
 - Explanation of Compression Set Testing
(also called Compression Recovery)
- Test Data Review
- Practical Test You Can Do

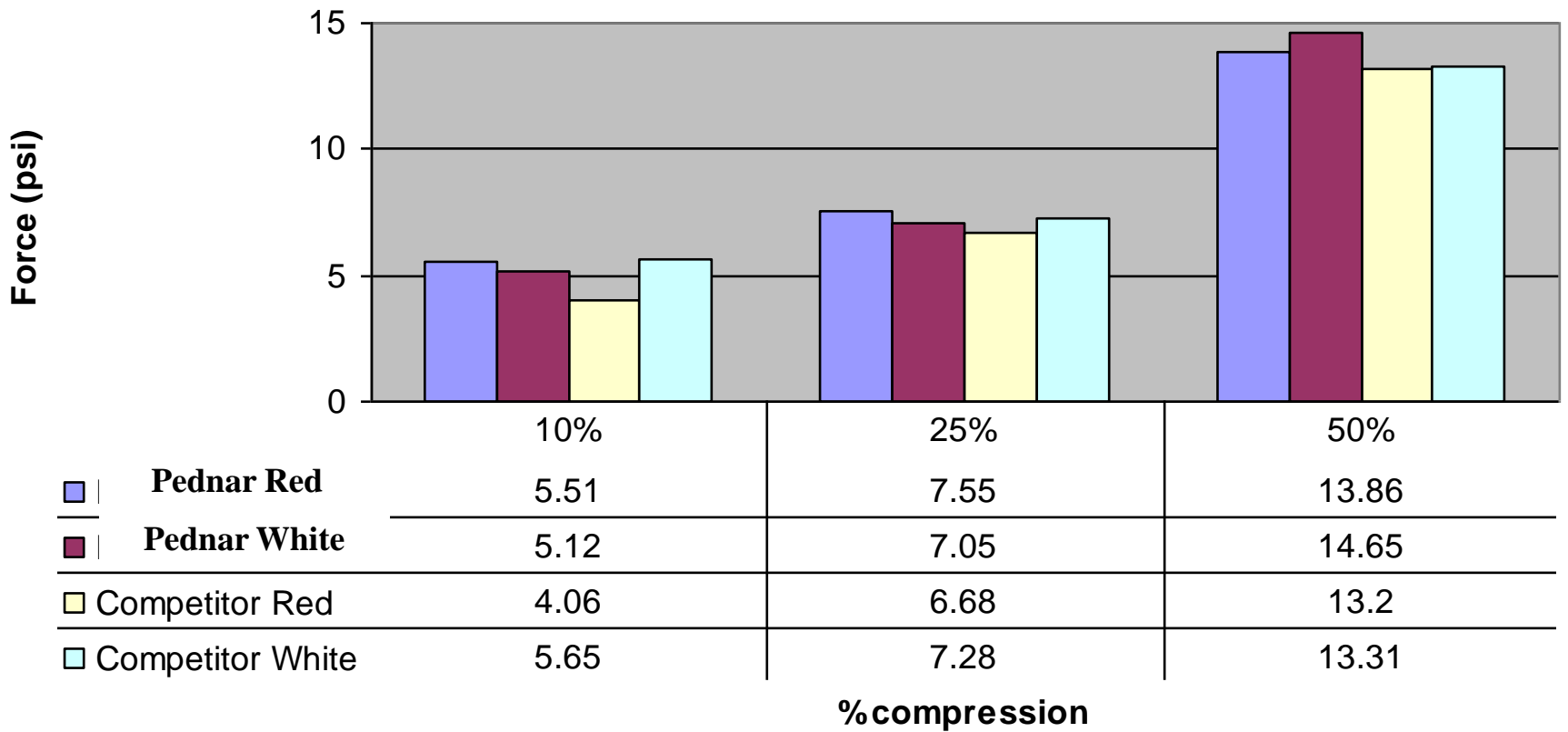
Compressive Strength

- The force required to compress the foam. As foam compresses, resistance increases
 - Typically compression amounts are discussed at 10%, 25% and 50% of the foams thickness.
 - The data value is displayed in pounds per square inch (psi) of force.
 - ASTM testing standards call for no skin on the tested samples. Pednar uses ASTM standard
 - A graph can be used to show results (next page)

Actual Compression Data

6" Roller Data

Compression Strength



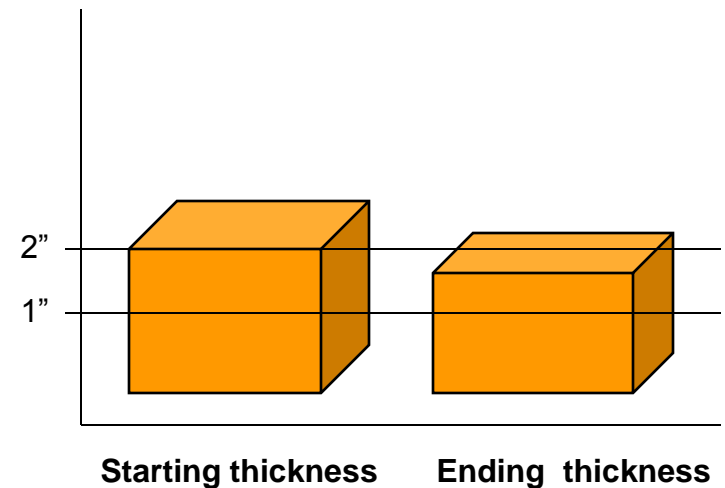
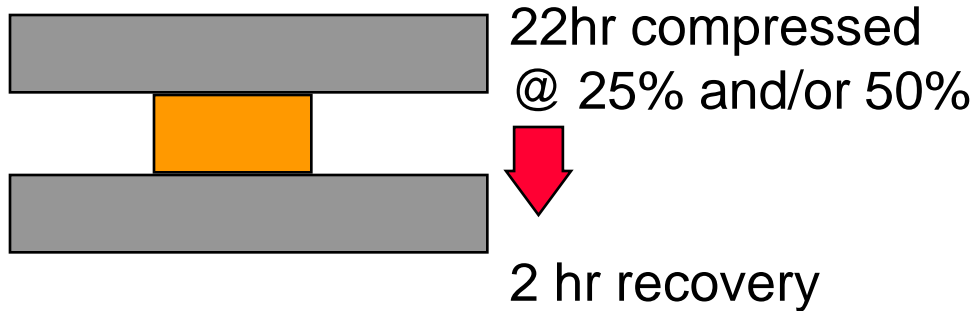
Compression Recovery

- The amount of recovery measured after release from a compression event.
- The data value is expressed as percent of recovery after a compression event.
- ASTM testing standards call for no skin on the tested samples. Pednar uses ASTM standard.
- The sample is compressed for 22 hours, allowed to recover for 2 hours.

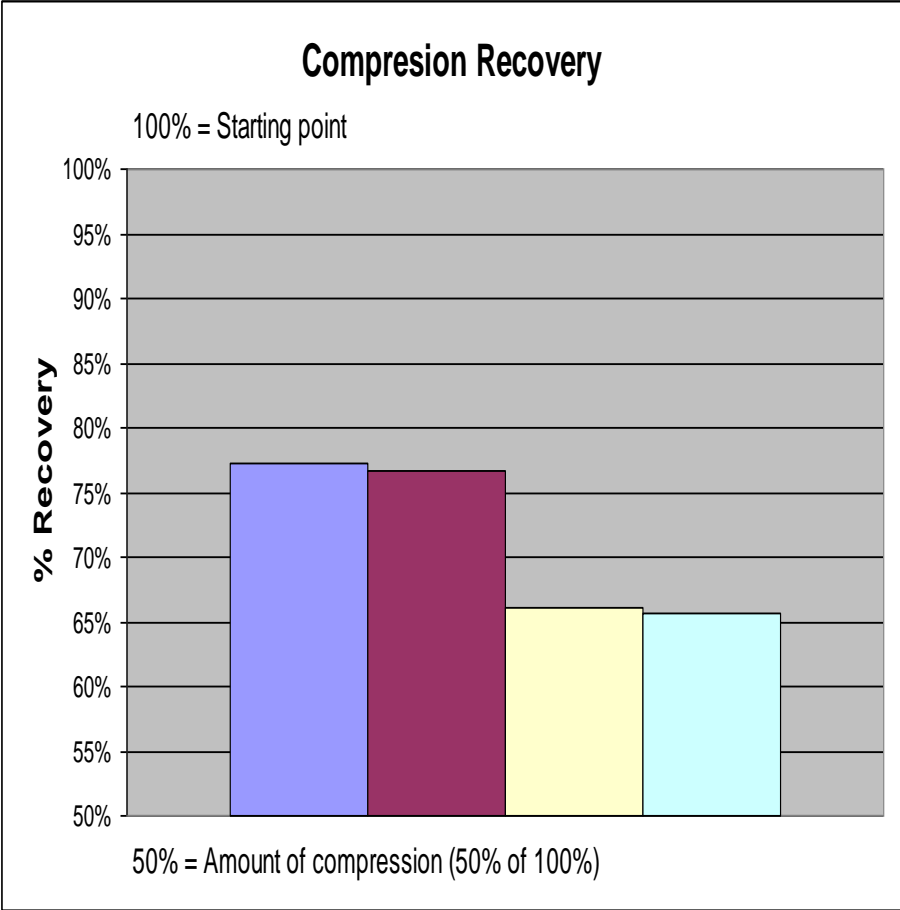
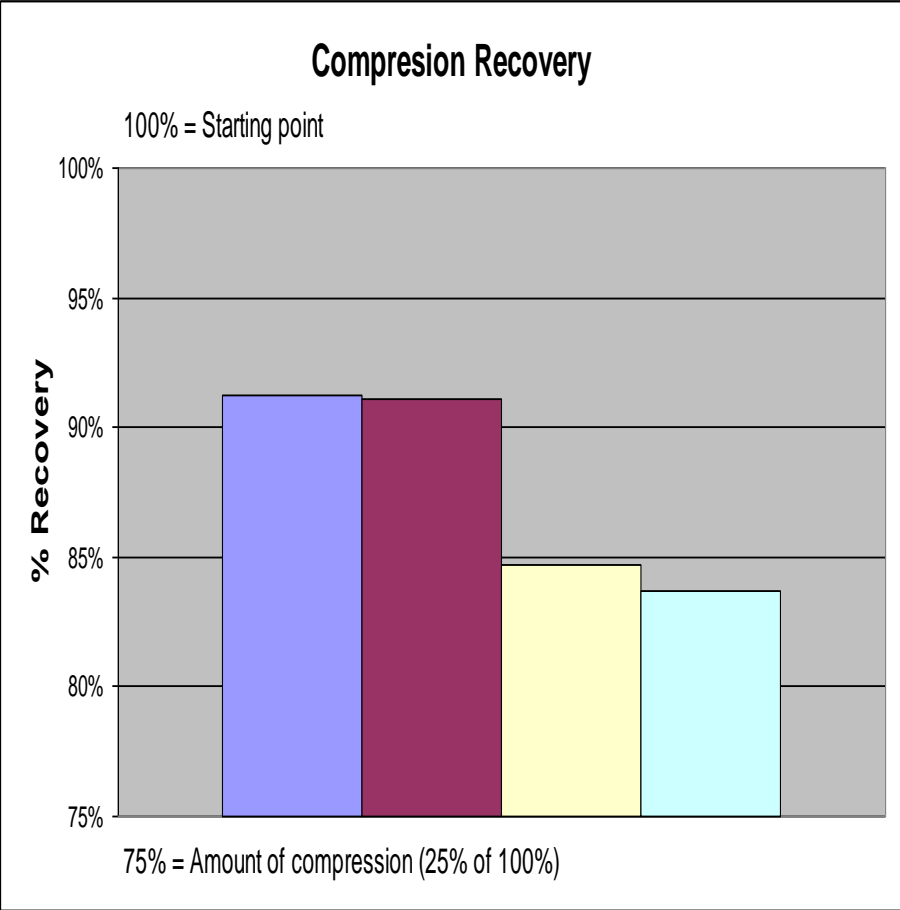
Compression Set Test

- Compression Set

- % of thickness lost
- (measured after 2 hours recovery)



Actual Compression Recovery Data



Practical Test

- The images to the right show compression in use. The person has a size 9 foot and is 180lbs
- The red roller is the China product and the White is Pednar's.
- The amount of compression is about the same, like the data indicates.



Practical Test

- The image to the right shows the amount of recovery.
- The image was taken within a few minutes after the compression done in the previous images.



Practical Test

- The images to the right shows the amount of recovery after 2 ½ days.
- The compression was done Friday @ 3:30 pm and the image to the right were taken Monday @ 10 am.



Conclusion

- The Pednar roller has slightly better compressive strength compared to the China roller, but similar.
- The Pednar roller has twice the recovery from a compression than the China roller.
- In actual testing the visual results match the formal tests.
- Pednar rollers will hold their shape better and longer than the China roller.