

Metric Conversion Addendum

Project: StormVault **Issuer:** DS Agencies Pty Ltd (trading as DS Group) **Date:** October 2026

This addendum provides metric conversions for the bench-scale compression testing data originally supplied by TRI Environmental, Inc. (TRI) in August 2023. Testing was based on ASTM D2412, modified to apply compression at 2.0% of chamber height per minute, as directed in ASTM F2418 and ASTM F2922.

This addendum converts units only and must be read with the original TRI reports dated 4 August 2023, log number 23-002813. It does not establish allowable design loads or certify project suitability. Average values are converted from the averages printed in the original reports. If any figure in this addendum differs from the original TRI reports, the original reports prevail. Site suitability is to be confirmed by the project's engineer.

Conversion Factors Applied

All values have been converted from the original imperial units to standard metric equivalents using the following engineering constants:

- **Load (Force):** 1 pound-force (lbf) = 0.00444822 kilonewtons (kN)
- **Stress:** 1 pound-force per square inch (psi) = 6.89476 kilopascals (kPa)
- **Extension:** 1 inch (in) = 25.4 millimetres (mm)

1. Vertical Configuration with Side Panels

The following table reflects the measured maximum compressive test results for the configuration labelled "Storm Vault - Side Panels Installed".

Test Specimen	Max Compressive Load (kN)	Max Compressive Stress (kPa)	Extension at Max Load (mm)
Specimen 1	188.8	641.9	10.6
Specimen 2	183.2	623.3	10.9
Specimen 3	191.8	652.2	11.1
Average	187.9	639.1	10.9

Converted from source document: stormvault-compression-test-vertical-with-side-panels-report-rev-1-2026-07-01.pdf

2. Standard Vertical Configuration

The data below details the structural response for the configuration labelled "Storm Vault". Load was applied at a constant rate of 2.0% of the chamber height per minute.

Test Specimen	Max Compressive Load (kN)	Max Compressive Stress (kPa)	Extension at Max Load (mm)
Specimen 1	133.4	453.7	10.4
Specimen 2	131.9	448.8	10.3
Specimen 3	125.0	425.4	9.7
Average	130.1	442.6	10.1

Converted from source document: stormvault-compression-test-vertical-report-rev-1-2026-07-01.pdf

3. Lateral Configuration

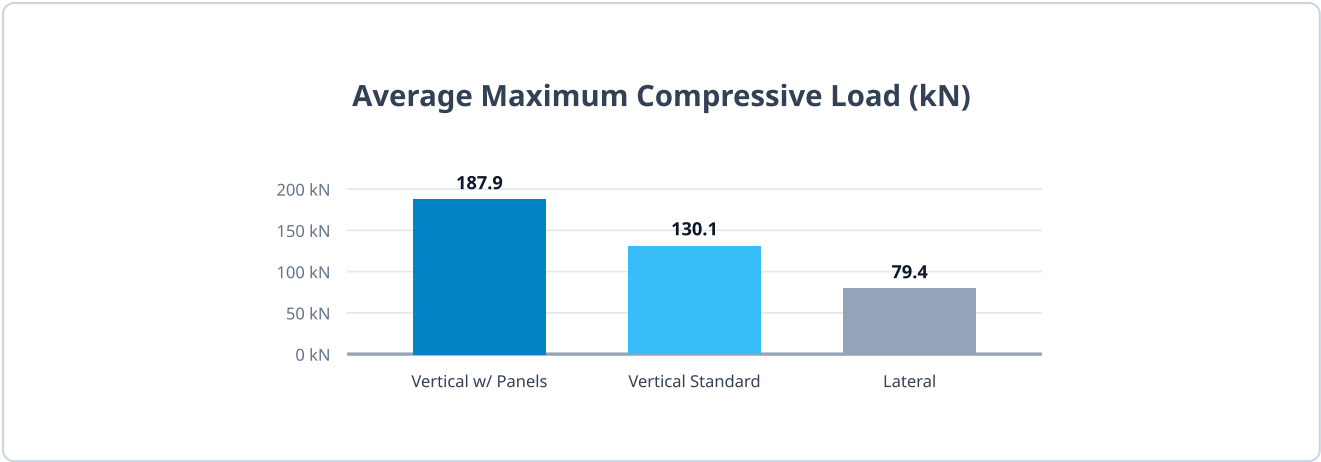
The lateral testing configuration shows the chamber loaded on its side between parallel plates.

Test Specimen	Max Compressive Load (kN)	Max Compressive Stress (kPa)	Extension at Max Load (mm)
Specimen 1	79.4	259.2	19.8
Specimen 2	79.6	259.9	20.5
Specimen 3	79.2	258.6	20.5
Average	79.4	259.2	20.3

Converted from source document: stormvault-compression-test-lateral-report-rev-1-2026-07-01.pdf

4. Summary Comparison

The chart below visualises the average measured maximum compressive loads across all three tested configurations. Note the higher peak load for the "Storm Vault - Side Panels Installed" configuration.



For exhaustive methodology details, full stress/strain deflection curves, and pre- and post-test photographs, please consult the original unabridged TRI Environmental reports cited in this addendum.