

To: ITW Construction Australia

23/01/2025

RE: Recommendation of design ductility factors for new RB32 ReidBrace system

This letter provides technical opinion on the recommended ductility factor (μ) for the new RB32 ReidBrace system with ReidBar AS/NZS 4671:2019 – strength grade and ductility class 500N. This is in addition to the technical opinion provided in an earlier letter dated 20 June 2022 covering ReidBrace sizes 12mm to 25mm.

In providing this recommendation for RB32, the following two reports supplied by Ramset have been reviewed:

- Test report titled “Structural performance testing of RB32 ReidBrace system” by Holmes Solutions dated 21 October 2024.
- Test report titled “Tensile testing of RB32 ReidBrace™ Structural Bracing Assemblies” by Melbourne Testing Services (MTS) dated 4 October 2024.

Based on the test results and findings of the abovementioned reports, and using the same analysis method adopted earlier for ReidBrace sizes 12mm to 25mm as outlined in the earlier opinion letter, it can be determined that a ductility factor (μ) of 1.5 can also be used for the new RB32 ReidBrace system. Thus, the same ductility factor (μ) of 1.5 applies to all sizes of the ReidBrace system from 12mm to 32mm. This ductility factor value is to be used with a Structural Performance Factor (S_p) of 0.7 in accordance with AS1170.4 (Structural Design Actions - Part 4: Earthquake actions in Australia, 2017).

Yours sincerely,



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