CEMQA Pty Ltd.
Phone: +61 401 532 358
Email: con@cemqa.com
Skype: con.adam

PO BOX 2660
MOUNT WAVERLEY,
VICTORIA, AUSTRALIA,
3149

21 September 2016

Wilmaplex Pty Ltd.
57 Lathams Road,
Carrum Downs, Vic 3201
Mr Graham storey

RE/ Wilmaplex Stud Ties Design Capacity

This is to confirm that Wilmaplex commissioned CEMQA Pty. Ltd. to undertake the task of testing and evaluating the design capacity Stud Ties (ST 400 U90MM-Stud Tie 10MM U BENT, ST R/A 400x25 – Stud Tie 155x245x25MM Right Angle) made out of Z275 steel with 1mmm thickness, see Figure 1, each leg of ties has 7 rows with 2 built in nails each. The evaluation was carried out via testing and computations. Design capacities are given in Table 1

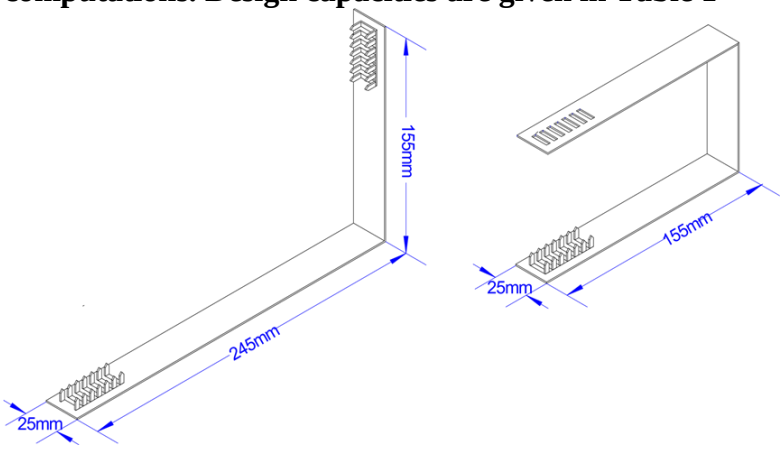

Figure 1 ST 400 U90MM-Stud Ties 10MM U BENT, ST R/A 400x25 – Stud Ties 155x245x25MM Right Angle.

Table 1 Stud Ties Capacitiy

Product Code	**Design Capacity φN_j (kN) per stud tie**
JD4	**6.3**

Tie-down capacities are based on AS1720.1 using k_1=1.14, for use in conjunction with AS/NZS1170l, also compliant with AS1684. A capacity factor φ = 0.85 and a duration factor k1 = 1.14 for wind uplift loading was applied to all the capacities in Table 1.

Dr Con Adam (Director)
CEMQA Pty. Ltd.
P.O. Box 2660
Mt. Waverley, VIC 3149