5 July 2007

Cupolex Building Systems Limited
PO Box 24 484
Royal Oak
AUCKLAND

Dear Sir/Madam

RE: CUPOLEX FLOOR SLAB: Durability and Cover

We have assessed the durability and cover achieved using the 260 high Cupolex Dome floor.

Generally the durability requirements are achieved via concrete cover in accordance with NZS3101 and the New Zealand Building Code using 20 Mpa concrete. Where the slab is located close to the sea (B2 exposure category) then 25 Mpa concrete should be used.

For 20 Mpa Concrete:

Cover to top mesh = 30mm min > 25mm required for exposure category A1 (internal)

Side cover to perimeter reinforcement = 50mm OK for exposure category A2 / B1

Bottom cover to perimeter reinforcement = 75mm OK for exposure category B1

At discrete locations the mesh sits hard down on the apex of the dome slab. At this point a continuous barrier of 0.5mm thick plastic exists. This plastic layer is capable of protecting the reinforcement (in both B1 and B2 exposure classes) for at least 50 years in accordance with NZBC requirements section B2/VM2.

For 25 Mpa Concrete the above comparisons are applicable with a B2 exposure category site (sea spray zone).

Please advise if you require further information at this stage.

Yours faithfully
Per: HFC: Harris Foster Consulting Limited

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DIRECTOR

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