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3 November 2014

AFS Systems Pty Ltd
39 Delhi Rd
NORTH RYDE NSW 2113

Attention : Mr S. Darwell

Dear Sir,

Re : AFS LOGICWALL – AS3600 Durability Compliance Review

1. Introduction

Mahaffey Associates has carried out a review of the AFS LOGICWALL system to assess whether a wall constructed using this system complies with the durability requirements of AS3600, “Concrete Structures”.

The LOGICWALL system is designed for the construction of reinforced or non-reinforced concrete walls. Once constructed, the formwork does not contribute to the structural capacity of the wall which acts as a normal reinforced concrete structure.

2. Discussion

The concrete and reinforcement are encapsulated within the fibre cement shell and coating which together act as a protective barrier. When used in the construction of walls in interior and exterior environments, the presence of the protective barrier enhances the protection against the effects of the prevailing environment.

LOGICWALL walls designed in accordance with AS 3600 will be subjected to environments consistent with a B2 exposure classification. AS3600 states that protective coatings can be taken into account when assigning exposure classification. Accordingly, the coating system plays a significant role in the design of the system in compliance with AS3600. In a typical

environment, the main agent of deterioration is carbonation. Therefore, the coated external skin in combination with concrete cover to the reinforcement, meets the durability and service life requirement of the standard.

The galvanised steel stud framework becomes embedded in concrete. Field evidence has shown that galvanised steel is durable in concrete in the harshest marine environment. In carbonated concrete, galvanized steel is even more resistant to corrosion.

3. Conclusion

Walls constructed using the LOGICWALL system comply with AS3600 provided that the concrete strength and cover meet the requirements of the standard for exposure classifications up to and including B2. Additional protection is provided to the concrete and reinforcement as well as to the components of the LOGICWALL system by the specified protective coating.

Yours faithfully,

Mahaffey Associates Pty Ltd



D. R. Mahaffey