



ELECTRONIC BLUEPRINT is the principal point of reference and knowledge base for Architects, Engineers and Builders and the only package that fully integrates regulatory & standards requirements with comprehensive, editable specifications, CAD details and approved industry training.

Cement Renders

Electronic Blueprint and ENVIROSPEC provide building specifications, details and training on safe and sustainable buildings to architects, engineers and builders. Rod Johnston (Principal of Electronic Blueprint) recently presented a training session to the Sydney HIA (Housing Industry Association) conference, discussing the correct specification of cement renders for internal and external use. A summary of appropriate mixes is given below:

| Type of mix for given exposure conditions | | | | | | |
|---|-------------------------------|----------|-----------|------------|----------|-----------|
| Coat | First & subsequent undercoats | | | Final coat | | |
| Substrate | Severe | Moderate | Sheltered | Severe | Moderate | Sheltered |
| Dense, strong materials | 1 | 1 | 2 | 2 | 2 | 2 or 3 |
| Moderately strong porous materials | 1 | 2 | 2 | 2 | 2 or 3 | 2 or 3 |
| Moderately weak porous materials | 2 | 2 | 2 | 2 | 2 or 3 | 2 or 3 |
| Mix types: Type 1. 1 part Portland cement: 1/2 part lime: 4 to 4 1/2 parts sand Type 2. 1 part Portland cement: 1 part lime : 5 to 6 parts sand Type 3. 1 part Portland cement: 2 parts lime : 8 to 9 parts sand All mix proportions are by volume. | | | | | | |

The presentation also discussed the causes of render cracking and discoloration, including:

- High cement content
- Excessively fine sands (requiring additional water)
- Excessive metallic oxide (requiring additional water)
- Render too thick
- High suction substrate leading to drying of the render
- Insufficient control joints or inappropriately placed control joints.



For further information, please contact Electronic Blueprint www.electronicblueprint.com.au