Cem-Gon

A NON-HAZARDOUS FORMULA PREPARED FROM NATURAL AND ORGANIC INGREDIENTS.

COMMODORE INTERNATIONAL LIMITED

APPRAISAL REPORT ON EFFECT OF CEM-GON CONCRETE MOVER ON THE SURFACE OF MATERIALS

1. SCOPE

1.1 This test procedure sets out the requirements to demonstrate that the CEMGON concrete mover system will not corrode or change the appearance of materials used in the construction industry.

2. APPLICABLE DOCUMENTS

2.1 New Zealand

NZ Building Code Handbook

Building Act 1991

Building Regulations 1995

Health and Safety in Employment Act 1992

Health and Safety in Employment Regulations 1995

2.2 Australian

AS/KZS 2312 - 1994	Guide to the protection of iron and steel against exterior atmospheric corrosion
AS 1627	Metal finishing - preparation and pre-treatment of surfaces
AS 1627.1 - 1989	Part 1: Cleaning using liquid solvents and alkaline solutions
AS 1627.10 - 1980	Part 10 : Cleaning and preparation of metal surfaces using acid solutions (non-immersion)

3. SAMPLES

3.1 If the test is being carried out on constructed work and that is not able to be moved then designate four areas of the surfaces as test samples.

3.2 For small samples prepare four items at least 50mm x 50mm square or larger.

3.3 Mark each set of sample test pieces as follows:

CG(--)A, CG(--)B, CG(--)C, CG(--)D

where (--) is the test number

4. PREPARATION OF THE SURFACE

4.1 The surface of all specimens shall be cleaned and degreased as set out in AS 1627.1 using one of the following processes as applicable:

Process	
AS	Alkaline spray process
AD	Alkaline dip or soak process
SS	Solvent spray degreasing process
SW	Solvent hand wipe degreasing process

4.2 After degreasing and rinsing with potable tap water the surface shall be air dried and checked for cleanliness using the Dry Smut Test as set out in Appendix C of AS 1627.10 - 1980.

4.3 If there is more than a trace of discolouration on the rice paper repeat the cleaning process.

5. EXAMINATION OF THE SURFACE BEFORE APPLICATION OF CEM-GON

5.1 Before application of the CEM-GON test material the surface of the sample shall be examined and any defects noted.

5.2 Also the surface condition of the following shall be noted:

- Base material
- Coating type
- Surface porous
- Surface finish (mirror, gloss, satin, matt etc)

6. APPLICATION OF CEM-GON

6.1 The CEM-GON mover shall be applied to each test specimen such that an identifiable symbol is formed such as "T", "+", "*" or capital letter.

6.2 The test specimens shall be stored for the test period of time in an environment similar in which the specimens exist within the construction industry.

7. TIME ·OF CONTACT OF MOVER

7.1 The specimens shall be cleaned and examined at the following intervals:

Specimen	Time After Application
A	30 minutes
B	One hour
C	Six hours
D	18 hours

7.2 Different times of contact of the cleaner to the specimen may be used subject to prior negotiation and acceptance in writing.

8 EXAMINATION OF SPECIMEN

8.1 Wash specimen under flowing potable tap water until all visible surface contamination is removed.

8.2 Remove remainder of potential contamination using cotton wool buds and deionised Water.

8.3 Air dry in a dust/contamination free environment. A heated air blower may be used provided it has a filter on the intake.

8.4 Store when cleaned in a sealed container separate from each other if required for later review.

8.5 Carry out a visual observation of the surface of the test sample and classify as follows:

Classification	Visual
A	The character where CEM-GON has been applied cannot be seen. There is no change in colour, texture or surface.
B	On coatings where there is a colour change in the shape of the symbol but no change in texture. On mirror, polished, electroplated or No. 8 finish on stainless steel there is a pattern or change to the sheen in the shape of the symbol.
C	In addition to above there is also a change in texture but upon examination under a magnification of 30x there is no noticeable corrosion of the surface compared with the untested surfaces.
D	Under a 30x magnification it is observed that there is corrosion of the surface (i.e. pitting or reduction of surface) which is not readily observable with the naked eye.
E	Corrosion of the surface is noticeable by the naked eye under good lighting.

9 COMPLIANCE WITH THE NEW ZEALAND BUILDING CODE

9.1 The successful and/or acceptable test of CEM-GON will assist the statement confirming compliance with the following documents:

9.2 Section B2: Durability

9.3 Section Fl : Hazardous Agents on Site

9.4 Section F2 : Hazardous Building Materials

9.5 Section F3 : Hazardous Substances and Processes

9.6 The Health & Safety in Employment Act 1992 (HSE

9.7 The HSE Regulations 1995