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TEST REPORT

REPORT NO : 2008CB1041

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Applicant : GROUP STEEL CORP (M) SDN. BHD.
180 Kawasan Industri Ayer Keroh,
Ayer Keroh, 75450,
Melaka.

Manufacturer : - Nil -

Product : GI Steel Sheet

Reference Standard/
Method of test : JIS G 3302 : 1994 – Hot-dip zinc-coated steel sheets and coils.
Clause 8.3 – Tensile test

Description of sample : Two samples of GI Steel Sheet were received for testing. The samples
were machined into tensile test specimen.
Brand : i) SGC 440MI ii) SGC 440MI
Thickness : i) 1.50mm ii) 1.90mm
Grade : SGC 440
Marking : i) HF 7848 - 1.5
ii) HG 3391 - 1.9

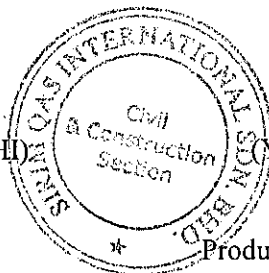
Date received : 24 / 06 / 2008

Job no./Ref. no. : J20085040958 / SQAS / CBMT / T.REC / MSL / 01

Issued date : 03 JUL 2008

Approved Signatories

(MOHD AMIR ABDULLAH)
Technical Executive



Jolie Hanan
M. RAJA NORSIHA RAJA ABD. HANAN)
Group Leader
Civil & Construction Section
Product Certification, Inspection & Testing Department

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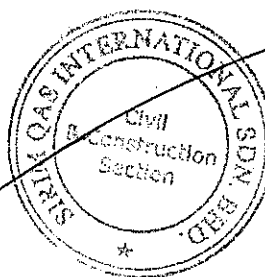
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TEST RESULT : TENSILE TEST

| SAMPLE REFERENCE | GI Steel Sheet HF 7848 - 1.5 | GI Steel Sheet HG 3391 - 1.9 |
|---|---------------------------------|---------------------------------|
| THICKNESS , a (mm) | 1.53 | 1.91 |
| WIDTH, b (mm) | 24.71 | 24.60 |
| AREA, S_0 (mm ²) | 37.81 | 46.99 |
| YIELD LOAD, (kN) | 18.10 | 23.30 |
| UPPER YIELD STRENGTH, R_{EH} (N/mm ²) | 479 | 496 |
| MAXIMUM FORCE, F_m (kN) | 20.55 | 26.34 |
| TENSILE STRENGTH, R_m (N/mm ²) | 544 | 560 |
| ELONGATION (%) | 15.0 | 19.0 |

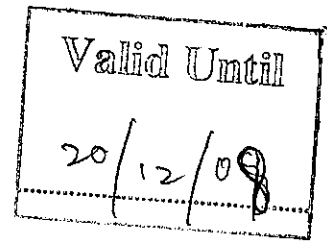
JIS G 3301 : 1994 Specification for grade SGC 440 :-

- 1) Yield Point : 335 N/mm² min
- 2) Tensile Strength : 440 N/mm² min
- 3) Elongation : 18.0 % min (Thickness 1.0mm to 2.50mm)



M-h

03 JUL 2008

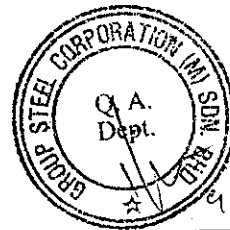
Beckers**Becker Industrial Coatings****BATCH QUALITY INSPECTION SHEET**

PRODUCT NAME : BeckryPrim GSC ZINC YELLOW
 PRODUCT CODE : DE211-13202
 CUSTOMER CODE : P1PPEP314
 BATCH NO. : 13386/0608
 BATCH SIZE : 10165 Ltr
 INSPECTION DATE : 07/07/2008
 MANUFACTURING DATE : 20/06/2008

| ITEM | STD SPECIFICATION | BATCH RESULT | CUSTOMER'S RESULT |
|--|--------------------------|-----------------------|-------------------|
| A. Wet Paint Properties | | | |
| Viscosity | 50 ± 10 sec @ 30°C | 58 sec | |
| S.G. | 1.13 ± 0.02 | 1.15 | |
| Fineness | < 25 microns | < 25 microns | |
| NVM | 50 ± 2% | 49.81% | |
| Volume Solid | 40 ± 2 % | 40.10 % | |
| Dry Film Density | 1.45 ± 0.02 | 1.43 | |
| B. Dry Film Properties of Primer | | | |
| Film Thickness | 4-5 µm | 5 µm | |
| Colour | As standard | Passed | |
| T-Bend (No Tape Off) | Max. 3T | 2T | |
| Solvent Resistance (Xylene) | Min. 40 DR | > 40 DR | |
| Coating Weight | 7 ± 2.0 g/m ² | 7.15 g/m ² | |
| C. Dry Film Properties Tested With DJ247 Top Coat | | | |
| Pencil Hardness (Faber Castell) | Min. H | H | |
| Adhesion (100x100@1mm) | No Tape Off | Passed | |
| R. Impact (½" x 500g X 50cm) | No Tape Off | Passed | |
| Erichsen (X-cut / 6mm) | No Tape Off | Passed | |
| T-Bend (No Tape Off) | 2T Max | 0T | |
| Solvent Resistance (MEK) | Min 100 DR | > 100 DR | |

Topcoat use BeckryPol GSC Esther Blue

BICM QA



GSC QA

Approved

Becker Industrial Coatings (M) Sdn. Bhd. (Co.No. 489501-P)

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