TENDER DOCUMENT

NIT No. : BHI/PI(s)/675/1036

FOR

Tender for Supply of Colour Coated GI Sheets, FRP Sheet and Ridge flashing and Corner flashing for Project- “Augmentation of Fuel & Flux Crushing Facilities (Pkg-064) for Bhilai Steel Plant at Chhattisgarh.

VOLUME – II

Tender Specifications (Profile and Sample Data Sheet of Roof & Cladding sheet)
PROFILE

DATA SHEET FOR ROOF/WALL CLADDING SHEETS

A) Relevant IS codes and specification requirement.
      a) Bare metal thickness minimum 0.5mm (metal thickness excluding thickness for Zinc aluminium alloy coating & Colour coating).
      b) Yield strength – minimum 550MPA as per AS:1397.
      c) Coating – Zinc aluminium alloynot less than 150 gms/sq.m.
      d) Painting in external Face-Min 20 microns (Nominal) dry film thickness (DFT) of Poly-vinyl di fluoride (PVF2) over 5 microns (Nominal) primer coat.
      e) Painting on internal face-12 Microns (Nominal) dry film thickness (DFT) of Poly-vinyl di fluoride (PVF2) over 5 microns (Nominal) Primer coat shall be as per category 3 of As: 2728.

B) Make of Galvalume Sheet: Bhushan Power & Steel Ltd./Any other reputed make.

C) Galvalume as per AS:1397 and painted with Poly-vinyl Di fluoride (PVF2)

D) Colour – Sky Blue (RAL-5012) on top side colour & White (RAL-9002) on bottom side colour.
DATA SHEET FOR ROOF AND WALL CLADDING SHEETS

Name of the project : Augmentation of Fuel & Flux Crushing Facilities, BSP, Bhilai.
Package No. : 064
Area : C-Line, CHP and CSP

A) Sheet of conveyor gallery, Junction houses:
Permanently colour coated troughed Galvalume metal sheets (Zinc aluminium alloy coated not less than 150 gms/sq.m.) for roofing and wall cladding having high tensile steel sheets (Fy 550 MPa) of 0.5mm thickness BMT as per AS : 1397.

B) Relevant IS code and specification requirement :
1) Specification provision :
   a) Bare metal thickness – Minimum 0.5mm (Metal thickness excluding thickness for Zinc Aluminium alloy coating & colour coating).
   b) Yield strength – Minimum 550 MPA as per AS: 1397.
   c) Coating – Zinc Aluminium alloy @ 150gsm/m2 (AZ 150 as per AS:1397)
   d) Painting in external face – Min. 20 Microns (Nominal) Dry film thickness (DFT) of Poly-Vinyl Di fluoride (PVF2) over 5 microns (Nominal) primer coat.
   e) Painting on internal face – 12 microns (Nominal) dry film thickness (DFT) of Poly Vinyl Di fluoride (PVF2) over 5mm microns (Nominal) primer coat shall be as per category 3 of AS: 2728.
2) Coval Provisions :
   a) Tolerance on thickness of bare metal shall be – tolerance ±0.06 mm as per IS: 16163
3) Test certificate required as per approved manufacturing quality plan of M/s MECON
4) Colour of sheets – Sky Blue (RAL-5012) on top side colour &White (RAL -9002) on bottom side colour.

CATEGORY OF DSG : APPROVAL INFORMATION REFERENCE RECORD CONSTRUCTION

BHILAI STEEL PLANT, BHILAI, CHHATTISGARH
7.0 MTPA EXPANSION

CONSULTANT

MECON LIMITED

CONTRACTOR

ENGINEERING PROJECTS INDIA LTD. (A Government of India Enterprise)

PACKAGE DESCRIPTION

AUGMENTATION OF FUEL & FLUX CRUSHING FACILITIES (PKG. 064)

DESIGN DRAWN

P.S E.J

SCHEDULE : NTS

EPI DOCUMENT NO. : EPI-BSP- 064-04 - DE - 05751 SHEET 4

PROJECT DOCUMENT NO.

BSP - EPI : 02 - 004 - 02 - 006 - 41 - DE - 05751 SHEET 4

REV

1 1 05.14 REVISED AS DRS No. DATE

1 05.14 REVISIONS 19.05.14
DATA SHEET OF FRP FOR WALL CLADDING SHEETS

Name of the project: Augmentation of Fuel & Flux Crushing Facilities, BSP, Bhilai.

Package No.: 064


Area: CHP and CSP

A) Sheeting of conveyor gallery, Junction houses:
3mm thick FRP (Fibre Glass Reinforced Plastic) Profiled Sheets for wall cladding having Barcol Hardness of more than 30% of its initial values as per IS: 12866/1989.

B) Relevant IS code and specification requirement:

1) Specification provision:
   a) Thickness – 3.0mm
   b) Density – Minimum 1.85 Kg/M².
   c) Glass Contents – More than 30%.
   d) Water Absorption – Less Than 0.30%

2) Codal Provisions:
   a) Tolerance on thickness of bare metal shall be – tolerance ±0.5 mm as per relevant IS Code.

3) Test certificate required as per approved manufacturing quality plan of M/s MECON

4) Light Transmission – More Than 75%.
PROFILE

DATA SHEET OF FRP FOR WALL CLADDING SHEETS

A) Relevant IS codes and specification requirement.
      a) FRP Thickness - minimum 3.0mm
      b) Tolerance: Thickness: ± 0.5mm
      c) Density – Minimum 1.85 Kg/M².
      d) Glass Contents – More than 30%.
      e) Water Absorption – Less Than 0.30%
      f) Barcol Hardness – More than 30%.

B) Make of FRP Sheet:
C) FRP as per IS:12866-1989.
D) Light Transmission – More than 75%.
DATA SHEET FOR FLASHINGS (RIDGES AND CORNER) FOR ROOF AND WALL CLADDING SHEETS

Name of the project : Augmentation of Fuel & Flux Crushing Facilities, BSP, Bilai.
Package No. : 064
Area : CHP and CSP

A) Flashing of conveyor galleries, Junction houses:
Made from Permanently colour coated troughed Galvalume metal sheets (Zinc aluminium alloy coated not less than 150 gms/sq.m.) having high tensile steel sheets (550 MPa) of 0.5mm thickness BMT as per AS : 1397.

B) Relevant IS code and specification requirement:

1) Specification provision:
   a) Bare metal thickness – Minimum 0.5mm (Metal thickness excluding thickness for Zinc Aluminium alloy coating & colour coating)
   b) Yield strength – Minimum 550 MPA as per AS: 1397.
   c) Coating – Zinc Aluminium alloy @ 150gms/m² (AZ 150 as per AS:1397)
   d) Painting in external face – Min. 20 Microns (Nominal) Dry film thickness (DFT) of Poly-Vinyl Di Fluoride (PVF2) over 5 microns (Nominal) primer coat.
   e) Painting on internal face – 12 microns (Nominal) dry film thickness (DFT) of Poly Vinyl Di fluoride (PVF2) over 5mm microns (Nominal) primer coat shall be as per category 3 of AS: 2728.

2) Codal Provisions:
   a) Tolerance on thickness of bare metal shall be – tolerance ±0.06 mm as per IS: 16163
   3) Test certificate required as per approved manufacturing quality plan of M/s MECON
   4) Colour of sheets – Sky Blue (RAL-5012) on top side colour & White (RAL -9002) on bottom side colour.
DATA SHEET FOR RIDGE AND CORNER FLASHINGS

A) Relevant IS codes and specification requirement.
      a) Bare metal thickness—minimum 0.5mm (metal thickness excluding thickness for Zinc aluminium Alloy coating & Colour coating).
      b) Yield strength – minimum 550MPA as per AS:1397.
      c) Coating – Zinc aluminium alloy not less than 150 gms/sq.m.
      d) Painting in external Face-Min 20 microns (Nominal) dry film thickness (DFT) of Poly -vinyl di fluoride (PVF2) over 5 microns (Nominal) primer coat.
      e) Painting on internal face-12 Microns (Nominal) dry film thickness (DFT) of Poly -vinyl di fluoride (PVF2) over 5 microns (Nominal) Primer coat shall be as per category 3 of AS: 2728.

B) Make of Galvalume Sheet: Bhushan Power & Steel Ltd./Any other reputed make.
C) Galvalume as per AS:1397 and painted with Poly-vinyl Di fluoride (PVF2)
D) Colour – Sky Blue (RAL-5012) on top side colour & White (RAL-9002) on bottom side colour.