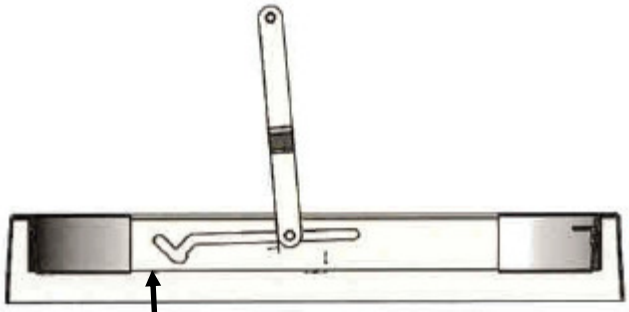
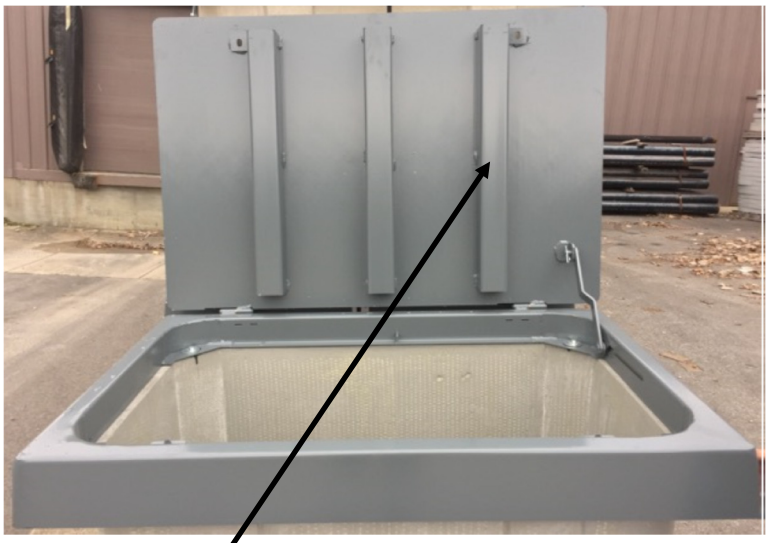
BOX ARMOR

REPLACEMENT LID FOR POLYMER CONCRETE UTILITY ENCLOSURES

- REHABILITATES AND EXTENDS LIFE OF DAMAGED BOXES
- PROTECTS INVESTMENT. AVOIDS COST TO SWAP ENTIRE BOX
- ALL STEEL CONSTRUCTION
- TIER 15 LOAD RATING
- TAMPER-RESISTANT HARDWARE FOR 7GA STEEL LID
- SINGLE PERSON OPERATION
- SLIDE ARM WITH SAFETY LOCK PREVENTS ACCIDENTAL CLOSURE



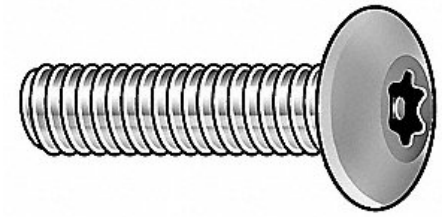


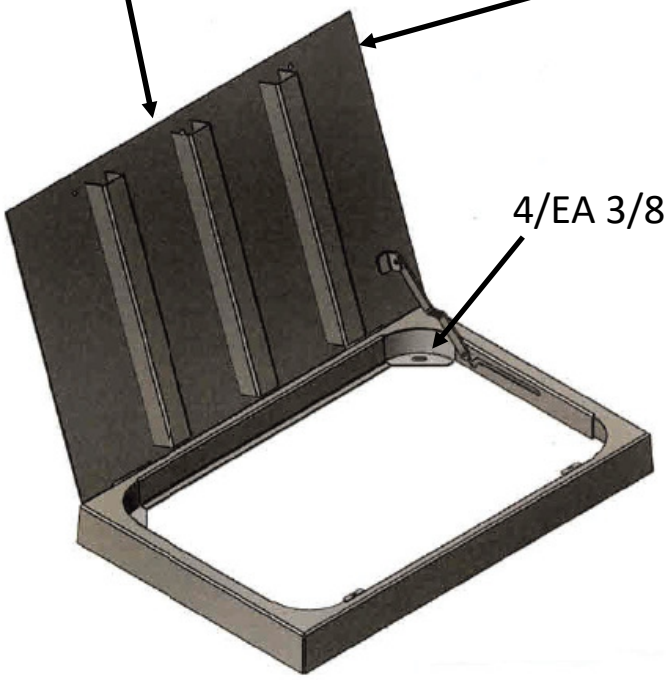
FRAME BODY FROM 10 GAUGE A36 STEEL

RIBS FROM 10 GAUGE GRADE 80 STEEL

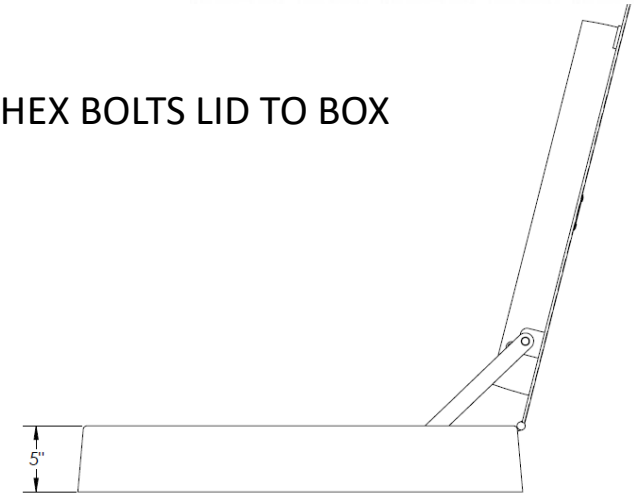
TREADPLATE LID FROM 7 GAUGE A36 STEEL

2/EA TAMPER-RESISTANT SCREW HEADS INSTALLED AT FRONT OF HINGED LIDS





4/EA 3/8 ZINC HEX BOLTS LID TO BOX



IGP-KORROPRIMER 1001

Priming powder for steel

IGP-KORROPRIMER 10 is mainly composed of epoxy resins, the corresponding hardeners, and the appropriate light-, heat-, chemical-, and corrosion-resistant pigments.

Technical Data Sheet

Characteristics

IGP Korropimers are corrosion resistant and have excellent chemical-resistance properties. All IGP powder varnishes, and water- and solvent-based top coats are suitable as finishing coats.
An adhesion test must be performed for these liquid coating systems for verification purposes.

Application

Primer for blasted or zinc-phosphatised steel surfaces and galvanized substrates.
IGP-Korroprimer 30 should be used for chromatised aluminium.

Product range

Surface aspects

- 1001A...A00, smooth finish, mat
  Light grey, approx. RAL 7035 and traffic grey, approx. RAL 7043.
- 1001A...V00, smooth finish, mat, optimised degassing for galvanized substrates, iron grey, approx. RAL 7011 and telegrey 4, approx. RAL 7047

Powder specification

- Particle size: < 100 µm
- Solids: approx. 99 %
- Density: approx. 1.6 – 1.8 kg/l
- Storage stability: at least 12 months
- Storage temperature: < 25°C

Packaging

- Carton with inserted antistatic PE sack, contents 20 kg.
  Carton with 25 antistatic PE sacks of 20 kg each; contents 500 kg.

Processing instructions

Pre-treatment
The substrate to be covered must be free of oxidation products, scale, oil, fat or release agent residue. For zinc and its alloys, a multi-stage chromatising process has proven to be best DIN EN ISO 12487 (look the Processing Guidelines PG 211)

Material approval

Qualisteelcoat material approval for compliance with the requirements of EN 1090-2:
ST2, corrosion category C4 - H
HD2, corrosion category C5 I - H
MS2, corrosion category C5 I - H
in combination with IGP-DURA®face 5807A

Article-specific safety data sheet and further risk management measures at:
www.igp-powder.com

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www.doldgroup.com

Processing instructions

Outdoor use

A substrate made of steel must be blasted, preferably with electro corundum or conditioned cut wire shot. After blasting, the norm purity degree must be at least SA 2 ½ (white metal blast) in accordance with DIN EN ISO 12944-4 . Further details can be found in this norm. Sharp edges, overlaps, etc., should be avoided (see DIN EN ISO 12944-3).

Indoor use

For heavy usage, steel metal sheet should preferably have a zinc phosphate treatment. For light use, (on iron or Zinkor), a complete de-greasing is adequate.

Coating equipment

IGP-Korroprimer 10 can be applied with all conventional electro-static systems (corona- and tribo-charging). Regulations to be observed: VDE provisions and VDM information sheet 23471.

Information regarding application

The pre-defined stoving conditions must be observed. If stoving temperature is too high, the circulation air temperature should be limited to a maximum of 200 ° C, in order to avoid problems with intercoat adhesion. When curing thick steel components at increased temperatures, we recommend only allowing the primer to set followed by a complete stoving process together with the top coat.

When curing in directly heated gas stoves, a sample should be done in advance to ensure the intercoat adhesion with the following top coat. Please contact our technical customer support. In all cases, practical experiments adapted to the particular object and stoving oven are recommended, in order to determine the best possible stoving conditions. Our technical customer support would be happy to advise you. "Cup-shaped components" must be galvanized prior to coating if they are intended for outdoor use.

Curing conditions

Below, you will find temperature and time combinations that will result in adequate cross-linking of the coatings.

Object temperature	retention time at object temperature
190°C	10 -15 min.
180°C	**20 - 25 min.***
170°C	25 - 30 min.

* Recommended curing conditions

Technological values

To determine the following data, IGP-Korroprimer 10 was applied as follows:

- iron sheet metal, 0,8 mm, blasted
- coating thickness approx. 60 µm
- object temperature of 180°C, 20-25 min.

Erichsen cupping, DIN EN ISO 1520	> 3 mm
impact penetration, ASTM 2794	10 inchpound
cross-cut adhesion test, DIN EN ISO 2409	GT 0

Chemical resistance properties

Coatings with «IGP-Korroprimer» show high resistance levels against many solvents and chemicals.

Preliminary test results for the powder coating system IGP-Korroprimer 10 as a priming powder and IGP-DURA®*face* 5807 as a top coating on blasted structural steel St 52 (surface preparation grade SA 2 ½) with a total layer thickness of approx. 140 - 160 µm, in accordance with DIN EN ISO 12944-6.

Test	Evaluation before exposure	Condensate test in accordance with ISO 6270-2, 720 hours	Salt spray test in accordance with DIN EN ISO 9227, 720 hours	Salt spray test in accordance with DIN EN ISO 9227, 1440 hours	Condensate test in accordance ISO 3231 with SO_2, 30 cycles
Cross-cut adhesion test, DIN EN ISO 2409	0	0	0	0	0
Degree of blistering, DIN EN ISO 4628-2	S (0)	S (0)	S (0)	S (0)	S (0)
Degree of rust, DIN EN ISO 4628-3		0	0	0	0
Fissure corrosion, mm DIN EN ISO 4628-8		0	0	1 - 2	0
Crack formation DIN EN ISO 4628-4		0	0	0	0
Degree of flaking, DIN EN ISO 4628-5		0	0	0	0

Note

All verbal and written application-related advice that we administer and have determined through experiments is based on the best of our knowledge, but is to be seen as non-binding information and does not release you from your responsibility to conduct your own experiments. Application, use and processing of the products occur beyond our possibilities of control and therefore lie exclusively in your sphere of responsibility.

IGP
POWDER COATINGS.

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