












TECHNICAL INFO

SELECTION TABLE : Type of Surface Treatments related to the Corrosion Class and Risks per type of Environment (EN ISO 14713)

Corrosion Class - Risk + Average zinc loss per year	Surface treatments	Typical environment - Indoor	Typical environment - Outdoor
C1 - Very low < 0,1 µm	Electro-galvanisation EN ISO 2081	 Heated buildings with neutral atmospheres : offices, shops, schools, hotels.	 Rural areas. Atmosphere with low impurities.
C2 - Low 0, 1-0,7 µm	Pre-galvanisation (SZ) Sendzimir galvanisation EN 10327 - EN 10.143	 Unheated buildings where condensation may occur: warehouses, shops, sports halls.	 City and industrial atmosphere, some impurities from sulphur dioxide, coastal areas with low salt loads.
C3 - Medium 0,7 - 2,0 µm	Hot-dip galvanisation (HD) EN ISO 1461	 Production facilities with high moisture levels and some air impurities : plants for food production, laundries, breweries, dairies.	 Industrial areas and coastal areas with low salt load.
C4 - High 2,0 - 4,0 µm	Hot-dip galvanisation (HD) EN ISO 1461	 Chemical plants, swimming pools, bathhouses above sea water.	 Industrial areas with high moisture levels and aggressive atmosphere.
C5-I - Very high (industry) 4,2 - 8,4 µm	Duplex (HD + Powder Coating) Stainless steel AISI 316L	 Buildings or areas with almost constant condensation and with heavy impurities.	 Coastal or offshore areas with salt load.
C5-M - Very high (sea) >4,2 - 8,4 µm	Duplex (HD + Powder Coating) Stainless steel AISI 316L	 Buildings or areas with almost constant condensation and with heavy impurities.	

SURFACE TREATMENTS

Sendzimir galvanised EN 10.143

Ref. : SZ

Most of the cable trunkings, accessories and threaded rod fixings are made of Sendzimir galvanised steel, also called continuous galvanised steel.

The hot-rolled steel belt goes, after preparation, through a continuous bath with liquid zinc. Through this, a layer of zinc is formed which guarantees the increased corrosion protection. Depending on the product type the thickness of the zinc layer varies from 140 to 275 gr/m², bilaterally calculated. This corresponds to 10 to 20µm with a tolerance of +/- 4µm.

Through the special Sendzimir zinc process, the steel-engraving can still be very easily carried out even after galvanisation. During the fabrication of the cable trunkings, the steel-engraving and the belt are punched, cut and bent. The exposed steel-edges are cathodically protected till a material thickness of 1.5mm is reached, as far as the zinc-layer had not already been bent over it during manufacturing. Substrate rust does not occur.

For normal interior construction purposes the Sendzimir galvanised materials offer more than adequate protection against corrosion (covered parking areas, various uses indoors etc.).

Hot-dip galvanised EN ISO 1461

Ref. : HD

Many cable ladders, ceiling profiles and brackets are hot-dip galvanised. For this surface treatment, other various terms are used such as fire galvanisation, thermal galvanization etc.

The finished pieces are plunged in a melt-bath with liquid zinc, after pre-treatment, at a temperature \geq +/- 450°C. A layer of zinc and iron is formed on the steel, which is covered with a pure zinc layer after removal from the zinc bath.

The thickness of the zinc layer depends on the thickness (gauge) of the steel. The guidelines in accordance with EN ISO 1461 are followed:

Material thickness	minimum localized layer thickness (µm)	minimum average layer thickness (µm)
≥ 6 mm	70	85
≥ 3 mm to < 6 mm	55	70
≥ 1.5 mm to < 3 mm	45	55
< 1.5 mm	35	45

Small Items are galvanised and centrifuged. With regard to this the specific guidelines recorded in EN ISO 1461 are followed:

Material thickness	minimum localized layer thickness (µm)	minimum average layer thickness (µm)
≥ 3 mm	45	55
< 3 mm	35	45

The increased thickness of the zinc layer ensures a better resistance against corrosion compared to continuous galvanised steel. Hot dip galvanised steel is also more suited to outdoor applications.

The requirements for hot dipped galvanised products refer to:

- the coating thickness of the galvanised layer or to its mass per unit area
- the outward appearance of the surface coating

The coating thickness is the deciding factor for the wear life in well-defined operating conditions. The thicker the coating, the longer the expected wear life. For most atmospheric exposures, a near-linear relationship exists between the two.

The second requirement concerns the outward appearance of the coating. On that score, the relevant standard (EN ISO 1461) stipulates the following:

- Products on which darker or lighter grey areas occur, whose surface exhibits some surface roughness or on which white storage stains can be found, will still meet the standard EN ISO 1461, providing the coating thickness remains above the specified minimum value.
- Lumps and zinc ash are permitted in places where they do not affect the intended use of the hot dipped galvanised object or its corrosion resistance requirements

Electro zinc plated (EN ISO 2081)

The wire cable trays and all sorts of fixation elements are electro zinc plated. During this procedure a thin zinc-layer is precipitated, varying in thickness between 6 and 8 microns, by means of an electrolytic process. After this the items are passivated and in this way protected against corrosion under normal indoor conditions.

Coated finishes

Our products are painted as standard in a fully automatic process.

Polyester powder coating (standard)

Ref : PE

The products we supply with a polyester powder coating finish easily meet the required standards. Polyester powder coating is suited to indoor and outdoor applications and offers a very high degree of resistance to all weather conditions.

Epoxy powder coating

Ref: EP

Epoxy coatings are characterised by their great resistance to both corrosion and chemicals. On the other hand epoxy powder coatings are not suitable for outside uses due to their poor resistance to UV light which results in degradation of the coating.

Epoxy powder coating + Polyester powder coating

Ref : EPPE

Epoxy is often used as a primer which will then have a polyester topcoat applied. This double layer coating results in a product that is both chemically and UV resistant.

Duplex System

Ref: DUPLEX

The combination of a hot-dip galvanizing and powder coating creates an extremely powerful protection against corrosion.

For technical advice and price inquiries, please consult our sales team. Delivery period of powder coated and duplex coated products is to be agreed upon in respect to volume and specifications.

General conditions

1. General

1.1 These conditions shall apply to all the contracts concluded by Vergokan (hereinafter "the seller") and to all quotations issued by the seller. Departures from these conditions shall only be valid if expressly agreed and indicated in a specially drafted annex duly signed by the seller.

1.2 Regardless of whether they are mentioned to the seller, any general or other conditions of the client shall only apply if expressly agreed, and indicated in a specially drafted annex duly signed by the seller.

1.3 If any provision in the present conditions is invalid, or is declared void, all the remaining provisions of the contract shall remain in force, and the seller and the client together shall in good faith consult in order to agree a new provision to replace the invalid or voided provision, such that as far as possible the purpose and tenor of the invalid or voided provision shall be taken into account.

2. Quotations and orders

2.1 All the seller's quotations are without obligation, unless expressly otherwise stated. Prices stated in the quotation shall remain valid for a maximum period of 30 days from the quotation date. Printing errors, material errors and errors in calculation shall not be binding on the seller.

2.2 References in a quotation to weight, tax and packaging are purely indicative and not binding on the seller.

2.3 Illustrations from the seller's catalogue are purely indicative and not binding on the seller.

2.4 Unless expressly otherwise stated in the quotation, a contract with the seller shall only come into being after the seller has accepted the order in writing. Only an order confirmation sent by the seller can consequently give rise to the existence of a contract.

2.5 Orders once placed may only be cancelled with the prior agreement of the seller. In the event of cancellation, the client shall automatically and without notice be liable to pay standard compensation of 10% of the order price, without prejudice to the seller's right to demonstrate a greater loss and to claim consequent damages.

3. Prices

3.1 Only the prices mentioned in an order confirmation issued by the seller shall be binding on him.

3.2 The price lists which may be published by the seller are purely indicative and not binding on him.

3.3 Unless otherwise expressly stated, all prices given in a quotation, order confirmation, contract etc. shall exclude VAT.

3.4 Unless expressly otherwise stated, all prices given in a quotation, order confirmation, contract etc. for deliveries in Benelux are DDP (Incoterms 2011). The client is responsible for prompt unloading (including any necessary equipment such as forklifts or cranes).

By way of exception to the previous paragraph, a flat rate transport fee of €25 shall apply to deliveries in Benelux with a net value of less than €250.

3.5 Unless expressly otherwise stated, all prices given in a quotation, order confirmation, contract etc. for deliveries outside Benelux are EXW Oudenaarde (Incoterms 2011).

4. Delivery times

4.1 The seller shall aim to meet the following delivery times, calculated from the date of the order confirmation:

- Standard material:

- sendzimir: 3 working days

- Hot-Dip: + 1 working day

- Non standard material / Powder coated and duplex coated products : Delivery period to be agreed upon in respect to volume and specifications.

In addition, for standard materials use can be made of the seller's rapid transport arrangements under which a delivery time of 24 hours is targeted.

4.2 The delivery times stated in Article 4.1 are only provided for information and are not binding, unless expressly agreed in writing by the parties. Delays in the performance of the seller's obligations can however never give rise to any right of compensation from the seller, nor to the termination of the contract.

5. Force majeure

5.1 Every acceptance of an order by the seller is subject to the circumstances of force majeure. Force majeure shall include total or partial strikes, lock-outs, accidents, transport shutdown, war, mobilisation, sequestration, failure to receive permits, lack of raw materials, total or partial sickness of the seller's work force, flooding etc. This list is not exhaustive. In the event of force majeure affecting the seller, his obligations to the client shall be suspended for the duration of the circumstances of force majeure.

5.2 If the circumstances of force majeure continue for longer than sixty days, the client is entitled to cancel the order, without the prior consent of the seller. The client may demand no compensation from the seller. Goods or services already delivered or provided by the seller under the contract shall be calculated pro rata.

6. Transport and acceptance of the goods

6.1 Deliveries by the seller within Benelux take place DDP (Incoterms 2011), in accordance with Article 3.4. At the client's request, and after prior written confirmation from the seller, deliveries can be made to another address than that of the client (e.g. an operational site). The delivery time given by the seller is purely indicative and gives only the date of delivery, not the time.

6.2 Deliveries outside Benelux are EXW Oudenaarde (Incoterms 2011), in accordance with Article 3.5. If the goods ordered are not removed by the client on the delivery date, the seller shall be entitled to charge the client for any storage costs incurred as a result.

6.3 If goods are delivered by the seller in stacking racks these shall be charged to the client at the rate of €150 per rack. If the stacking racks are returned to the seller in good condition, the sum paid in respect of stacking racks by the client shall be credited to him. The seller shall never be obliged to take back from the client more stacking racks than he himself has supplied.

7. Confidential information

7.1 The client guarantees that all the technical information which he receives from the seller before and after the conclusion of the contracts shall remain confidential in nature. Information shall be regarded as confidential if it is so indicated by the seller. In addition, information shall be confidential in nature when the confidentiality thereof can be reasonably assumed. Under no circumstances may the client copy, transfer or give sight of any technical information which remains the property of the seller to any third party. The sale of any of the goods produced or sold by the seller shall never imply the transfer of any intellectual property rights.

8. Complaints

8.1 The client must inspect the goods immediately on delivery. The client must notify the seller in writing of any complaints within eight days of the delivery of the goods. Such complaints shall otherwise be deemed to have lapsed. The letter must contain a detailed account of the faults. The use of a delivery or parts thereof shall irrefutably constitute acceptance of the whole delivery.

8.2 Complaints regarding hidden defects must be notified to the seller in writing within eight days of discovery thereof. Such complaints shall otherwise be deemed to have lapsed. The 'short term' referred to in Article 1648 of the Civil Code shall, between the present parties, be a period of two months following the discovery of the defect.

8.3 In the case of a visible or hidden defect which is brought to the attention of the seller in good time and in accordance with the present article, the seller may simply exchange the goods in question. The seller may never be compelled to replace or take back goods supplied. Goods shall only be taken back with the seller's written prior consent. In the event of the written consent of the seller, the seller shall himself take the initiative for removal of the returnable goods at his own expense. The goods must be in their original state.

8.4 In the case of a visible or hidden defect which is brought to the attention of the seller in good time and in accordance with the present article, and where in accordance with Article 8.3 the seller decides to exchange the goods, no compensation shall be due from the seller.

In the case of a visible or hidden defect which is brought to the attention of the seller in good time and in accordance with the present article and where the seller decides not to replace the goods in accordance with Article 8.3, the compensation due from the seller in the event of a demonstrable contractual fault shall be limited to the price of the goods in question, excluding VAT. In no event may any compensation be due from the seller in the event of indirect or immaterial damage (including, but not limited to, forgone profit, missed opportunities, or other consequential loss).

8.5 The seller may never be held responsible for any damage or defect in the goods supplied that may be ascribed to the use of the goods in a specific environment.

8.6 Any liability of the seller with regard to the goods supplied shall be limited to a period of six months after delivery. After the expiry of this period, the seller may no longer be held liable by the client for defects in the goods supplied.

8.7 The seller may not be held responsible for any damage or defect in the goods supplied arising from the mistaken, noncompliant or careless use thereof or from their mistaken, noncompliant or careless treatment or installation.

9. Reservation of title

9.1 The goods supplied shall remain the property of the seller until the full payment of the original sum, costs and interest by the client. Until full payment for the goods has been made, they may be repossessed by the seller.

The client undertakes not to make use of the goods, nor to process them nor to grant any commercial rights over them, inter alia using them as security.

9.2 This retention of title shall also apply in the event of bankruptcy of the client, insofar as the goods are in stock on the client's premises, and have not become immovable through incorporation.

10. Payment

10.1 The invoice shall be paid within 30 days of the invoice date, unless expressly otherwise stated on the invoice. Disputes or complaints, even if valid, do not suspend the client's duty of payment.

All the seller's invoices are payable to Oudenaarde, even if bills of exchange have been drawn.

10.2 If the invoice has not been paid on the due date, the seller has the right to suspend all his current undertakings vis-à-vis the client in question with immediate effect, until such a time as the invoice is paid.

10.3 If the invoice has not been paid on the due date, the client shall be liable, automatically and without notice, to make interest payments at the rate of 3% above the statutory rate on the due date.

In addition, where the invoice has not been paid on the due date the client shall be liable, automatically and without notice, to pay a fixed amount of compensation in the sum of 10% of the total invoice sum including VAT, with a minimum of €50 and a maximum of €3 750, without prejudice to the seller's right to demonstrate a greater loss and to claim consequent damages.

10.4 The failure to pay any given invoice on the due date shall automatically cause all sums due to the seller from the same client on the basis of other invoices to become due in full immediately, automatically and without notice.

10.5 In the event of failure to pay the invoice on the due date, the seller may, automatically and without notice, immediately repossess the goods supplied.

10.6 The drawing and/or acceptance of bills of exchange or other negotiable instruments implies no novation and in no way adversely affects the applicability of the present conditions.

10.7 If the client should fail to comply with one of his essential obligations, such as the prompt payment of the seller's invoices, the seller is entitled to terminate the contract without prior judicial authority and without prior notice, with immediate effect.

10.8 Without prejudice to the provisions of Article 8, in the event of dispute an invoice must be protested within 8 days of receipt thereof by the client.

11. Guarantees to be provided by the client.

11.1 The client undertakes to provide the seller's credit insurer with all the information that this credit insurer deems necessary to assess the client's credit standing.

11.2 If the amount due to the seller by a client, meaning the sum of unpaid invoices and the value of orders still to be fulfilled by the seller, exceeds the limit determined for the client in question by the seller's credit insurer, the seller has the right to suspend all his obligations to the client with immediate effect until the amounts due by the client to the seller (including the sums which would have been due had the seller performed the suspended obligations) once again fall below the above-mentioned limit.

11.3 If the seller's confidence in the client's credit standing is undermined by a court decision against the client, and/or other demonstrable events which damage or could damage the seller's confidence in the client's proper performance of his obligations, the seller has the right to demand a suitable guarantee of the client. Should the client refuse to provide a suitable guarantee, the seller is entitled to cancel the order wholly or in part, even if some or all of the goods have already been dispatched. Under such circumstances, the client shall automatically and without notice be liable to pay standard compensation of 10% of the order price, without prejudice to the seller's right to demonstrate a greater loss and to claim consequent damages.

12. Disputes

12.1 Only the courts of the judicial district of Oudenaarde shall be competent in disputes regarding the establishment, performance, non-performance etc. of any contracts concluded or quotations issued by the seller.

12.2 Only Belgian law shall be applicable to the contracts concluded or quotations issued by the seller, with the exception of the rules of international private law (including the CISG and other comparable conventions).