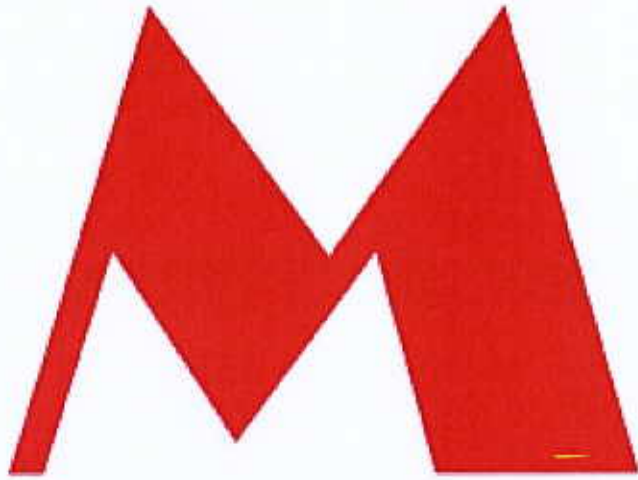




MATERIAL PACKAGING STANDARDS – COILS



MARWOOD

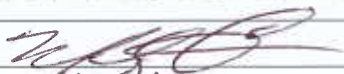
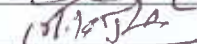
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- Plant 1 - 35 Spruce Street, Tillsonburg, Ontario N4G 5C4
- Plant 2 - 35 Townline Road, Tillsonburg, Ontario N4G 4H3
- Plant 3 - 101 Townline Road, Tillsonburg, Ontario, N4G 4H3
- Plant 4 - 105 Spruce Street, Tillsonburg, Ontario, N4G 5C4

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MATERIAL PACKAGING STANDARDS – COILS

1.0 OVERVIEW

Material packaging specifications are developed in order to provide consistency in the following areas:

- Material Preservation
- Safe handling
- Material Physically consistent with Production and material handling equipment

This document is intended as a guideline to make coil stock suppliers aware of the requirements that will provide the basis for material approval and invoice payment. It will also ensure continuity of general supply and delivery standards. Packaging requirements will be consistent minimizing the likelihood of return and reducing the time required to unload.

2.0 STANDARD PACKAGING

This section defines Marwood's current handling capabilities and requirements. When determining packaging characteristics, the highest priority is to be given to packaging details that are included on the purchase order or material release.

All shipments of coil steel or aluminum must be tarped.

2.1 Material Handling – Lift Truck -- Rear Unload

Max lift weight	20000 lbs (Eye-to-Cab)
Max coil weight	12000 lbs (Eye to-Sky)
Outside Diameter	72 In Max
Inside Diameter	18 In Min / 24 In Max
Packaging type supported	Standing coils and Pallets Rear Unload Only

The front trailer of any trailer train combination must contain coils for crane unload only.

2.2 Material Handling – Crane

	Plant 2	Plant 3
Max lift weight	40000 lbs ^T	47000 lbs ^T
Max coil weight	40000 lbs ^T	47000 lbs ^T
Outside Diameter	72 In Max	
Inside Diameter	18in Min / 24 In Max	

^T For Max Coil weight limit for any part, instruction on Purchase Order will be final.

2.3 Coil Banding Requirements

Minimum banding requirements are listed in the table below**

Coil Dimensions	Number of bands through eye	Number of bands around coil
Less than 1.5" wide	¾" – 4 Bands	None Required
Less than 1000 lbs	¾" – 2 Bands	¾" – 1Band
1000 lbs to 5000 lbs	¾" – 3 Bands Or 1 ¼" – 2 Bands	1 ¼" – 1 Band

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Greater than 5000 lbs	3/4" – 4 Bands Or 1 1/4" – 3 Bands	1 1/4" – 1 Band for coils less than 20" wide 1 1/4" – 2 Bands for coils greater than 20" wide
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** When packaging coils of aluminum, strips of tape can be used instead of steel bands around the coil.

2.4 Coil Orientation and Packaging Requirements

Eye to Sky

- Coils less than 12" must be shipped on a skid (eye-to-the-sky), and attached to the skid.
- Multiple coils are to be banded together with 1 1/4" banding
- Coils are to be separated with 3"x3" hardwood spacers
- Each lift to be shipped on hardwood pallets, sized to safely support and prevent telescoping of the coil.
- All pallets require 4" x4" runners
- All contact surfaces between wood packaging and steel is to be covered with a moisture barrier
- The center opening of the coil is to be clear of all packaging material to allow access with an ID coil-lifting device.
- Pallet must be Rear Unload oriented

Eye Horizontal

- Coils greater than 12" in width may be shipped standing (eye horizontal).
- Coils to be shipped as single units or banded together in packages less than 40,000 lbs.
- Coils over 12" may be banded together provided 3"x3" hardwood spacers are placed between the coils to allow access for the crane and chain.
- Bunks cannot be longer than 5'

2.5 Labeling

Each individual Coil is to be labeled.
Each label is to contain the information indicated below. Information indicated with an '*' must be in text and bar code formats.

- Marwood Part Number *
- Quantity in lbs *
- Material Specifications *
- Mill Coil Number *
- Heat number *
- Service center lot # *

3.0 Processing Requirements

- 3.1 All coils are to be provided as "Slit Edge" unless otherwise specified on the purchase order.
- 3.2 Width tolerance for all coils is +/- 0.010" unless a different tolerance is recorded on the purchase order.
- 3.3 The inside edge (tail) of the coil may not extend more than 1" into the center opening for hot rolled material and not more than 2" for cold rolled material.
- 3.4 No balancing paper is allowed.

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- 3.5 Where coil inners are required to protect the inside of the coil, plastic coil inner protectors are preferred over steel coil inner protectors.
- 3.6 When processing aluminum coils cardboard cores can be used to ensure that the coil center does not collapse.

4.0 Quality Assurance and Documentation

4.1 Mill Certs

Chemical certification is to accompany each coil supplied to Marwood. Physical certs, when required, as specified on the purchase order are to accompany the shipment.

Actual coating weights shall be specified/ provided with each shipment

Certs are to be maintained on file at the Service center for at least 7 Years

4.2 Return of Non-conforming product.

It is Marwood's policy to collect all substandard material issues in a timely manner. To this end, Marwood will store any non-conforming product for a maximum of two weeks-commencing at time of Supplier notification. During this time, the supplier is encouraged to examine their product at our facilities or to make arrangements for pick-up. Defective material stored at Marwood for more than two weeks will be shipped back to the supplier at the supplier's expense.

5.0 Penalties

- 5.1 When non-conforming product arrives at Marwood the non-conformance will be brought to the attention of the supplier. The supplier may authorize Marwood to use the non-conforming product as supplied. Any resulting machine downtime or additional labour costs incurred will be the responsibility of the supplier.
- 5.2 Marwood may elect if required to use the material initially identified as non-conforming product. Any resulting machine downtime or labour costs incurred will be the responsibility of the supplier.
- 5.3 For product where minimum and maximum outside coil diameters are specified, a handling charge of \$125.00 per coil will be debited for each coil not meeting purchase order or material release requirements.

6.0 Acknowledgement

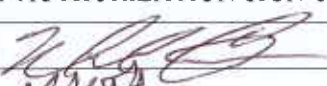
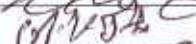
Email a signed copy to your Marwood Contact

I acknowledge that I have read and understood this document

Supplier Name: _____

Signature: _____

Date: _____

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