



# Madison Chemical Industries Inc.

## PRODUCT SELECTOR GUIDE *Metal Coatings Decision Trees*

Version 2, September 2009

### INTRODUCTION

Madison Chemical has been a leader in infrastructural coatings for over 35 years. Ongoing research has recently led to the introduction of new technology, including water borne products and a 'Next Generation' Zinc Rich Primer to complement our traditional fast set, plural component polyurethanes. As well, we introduced a new 'blast-free' surface preparation product. These developments have opened a new array of metal coating options, and the decision tree is a quick reference guide to help users select the best choice for their particular situation.

To help you in your selection, here are some descriptions and definitions:

**GalvaGrip:** A proprietary surface conditioner/adhesion-enhancing compound for galvanized surfaces

**GalvaClad Aromatic:** A multi-purpose 100% solids, 1:1 fast set polyurethane protective coating

**GalvaClad Aliphatic:** Similar to GalvaClad Aromatic, with premium resins for color and gloss stability

**GalvaClad Liquid Zinc:** A versatile, user friendly, surface tolerant primer/repair coating

**GalvaClad II Ultra:** A high performance 100% solids, 1:1 fast set polyurethane for severe service including immersion conditions

**FerroGrip:** An easy to use surface preparation compound specifically designed for steel surfaces

**FusionClad Primer:** Advanced water borne polymer-based steel primer

**FusionClad TC:** (short for Top Coat) - Advanced water borne acrylic technology topcoat

**FusionClad TC Ultra:** Advanced water borne polyurethane technology topcoat

**AlumiZinc S:** 'Next Generation' Zinc Rich Primer, has the desirable performance properties of zinc rich primers in a more user friendly format

**AcrylaThane:** Aliphatic polyurethane topcoat designed for color and gloss stability

**CorroCote:** A family of high performance polyurethane coatings; primarily 1:1 fast set, high build coatings, however other slower setting, paint-like products are available

**Commercial Blast:** SSPC-SP6 - A moderate level of abrasive blast, removing all rust, mill scale, contaminants, however some surface staining is permitted

**Power Tool Clean:** SSPC-SP3 - Cleaning designed to remove some rust and staining, leaving a slight surface profile

**UV:** Ultra violet light. Will discolor most coatings unless they are specifically formulated to be "UV stable"

Note: should your requirement be for tank linings and coatings, we refer you to a companion document - **Product Selector Guide - Steel Tank Decision Trees** for specific recommendations. For utility structures such as poles and towers, please refer to Product Selector Guide – Utility Structures Decision Tree.

Please contact a Madison representative should your specific needs not be addressed by these documents or you wish to receive detailed product data and specifications.

Note: the following are Trademarks and/or Registered Trademarks of Madison Chemical Industries Inc.: Madison, GalvaClad, FerroGrip, FusionClad, AlumiZinc, AcrylaThane and CorroCote.

RS; rs/F:\DATA\Literature\Library\Madison\40PSGDecisionTrees\MetalCoatingsDecisionTree ver 2 2009 09 01



MADISON CHEMICAL INDUSTRIES INC.  
490 McGeachie Drive, Milton, ON, Canada, L9T 3Y5  
Tel: (905) 878 - 8863 Fax: (905) 878 - 1449  
E-mail: [sales@madisonchemical.com](mailto:sales@madisonchemical.com) Web site: [www.madisonchemical.com](http://www.madisonchemical.com)

# Metal Coatings Decision Tree (Non Galvanized)

**Light to Moderate Service**  
(excludes immersion, ponding water, embedment, highly corrosive environments)

FusionClad System

OPTION 1– Highest UV, abrasion and impact resistance  
  
Surface Preparation: FerroGrip  
Primer: FusionClad Primer: 3-5 mils DFT  
Topcoat: FusionClad TC Ultra: 4-6 mils DFT

OPTION 2– Good overall protection or for moderate levels of ponding water  
  
Surface Preparation: FerroGrip  
Primer: FusionClad Primer: 3-5 mils DFT  
Topcoat: FusionClad TC: 4-6 mils DFT

**Moderate to Heavy Service**  
(excludes immersion, embedment)

Alumizinc 'S' System

OPTION 1– Topcoat with highest UV, abrasion and impact resistance  
  
Surface Preparation: FerroGrip  
Primer: Alumizinc 'S': 3-5 mils DFT  
Topcoat: AcrylaThane 5200: 5-7 mils DFT  
TOTAL: 8-12 mils

OPTION 2– Topcoat with good overall protection  
  
Surface Preparation: FerroGrip  
Primer: Alumizinc 'S': 3-5 mils DFT  
Topcoat: AcrylaThane 55: 5-7 mils DFT  
TOTAL: 8-12 mils

OPTION 3– Basic protection, topcoat not required or to be added later  
  
Surface Preparation: FerroGrip  
Alumizinc 'S': 6-8 mils DFT (2 coats)

**Heavy to Severe Service**  
(for Tank applications, refer to *Product Selector Guide - Steel Tank Decision Trees* for specific systems)

Linings  
(abrasive blasting is required)

Options depend on nature of fluid contents  
Plural Component products:  
CorroCote II Plus – multipurpose, broad spectrum protection  
CorroCote II PW – potable water and fuels  
CorroCote II Ultraliner – extra resistance to harsh chemicals/high abrasion  
Flexcel II – suited for very high abrasion resistance  
  
Mix and Apply systems:  
MG 120 – multipurpose epoxy-polyurethane hybrid  
CorroCote 'S' - easy application, resistance to wide variety of fluids

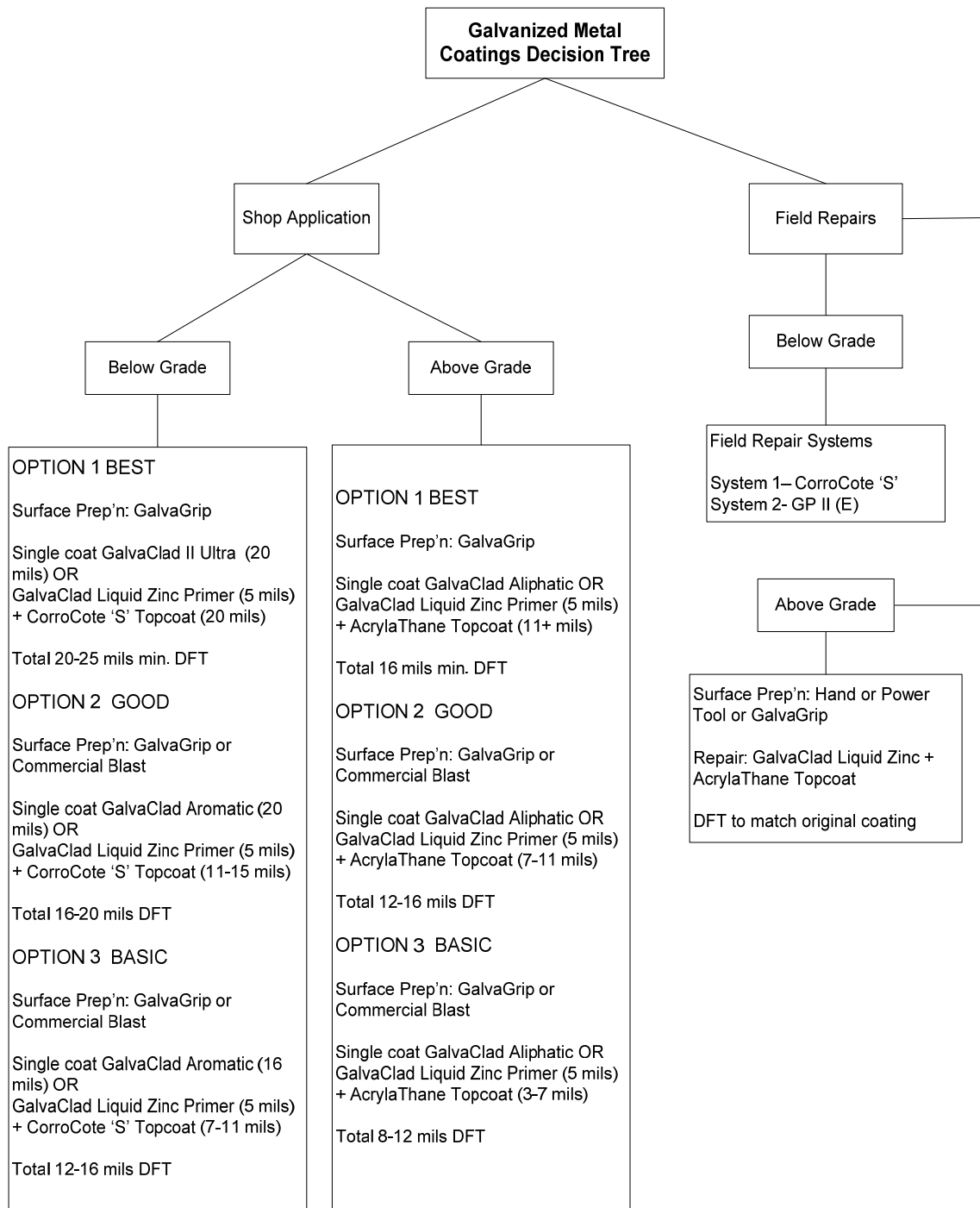
Exterior

Above Ground

Below Ground  
(abrasive blast required)

OPTION 1  
Surface Prep'n: FerroGrip or Abrasive Blast  
Single coat Tufsheen II - 20 mils min DFT  
  
OPTION 2  
Surface Prep'n: FerroGrip or Abrasive Blast  
Base coat: CorroCote II Plus – 20 mils  
Top coat: AcrylaThane 55 or 5200 -5 mils

Options depend on nature of exposure:  
CorroCote II Classic: 1:1 fast set, general use  
CorroCote II Plus: 1:1 fast set, multiple colors  
CorroCote 'S': Single component plus catalyst  
FibreThane Plus – 1:1 fast set (STI licensees only)



**MADISON CHEMICAL INDUSTRIES INC.**  
490 McGeachie Drive, Milton, ON, Canada, L9T 3Y5  
Tel: (905) 878 - 8863 Fax: (905) 878 - 1449

E-mail: [sales@madisonchemical.com](mailto:sales@madisonchemical.com) Web site: [www.madisonchemical.com](http://www.madisonchemical.com)

**METAL COATINGS DECISION TREE**