

HEADER BLOCK

## Project / Buyer Information

Company: \_\_\_\_\_ Project name: \_\_\_\_\_

Site location (city / country): \_\_\_\_\_ Install area: \_\_\_\_\_

Buyer contact (name / email): \_\_\_\_\_ Date: \_\_\_\_\_ Rev: \_\_\_\_\_

Products in scope:  Ladder  Caged ladder  Roof access  Stairs  Platforms  Handrail / guardrail  Other

1) Complete fields A-E. 2) In the matrix, check ONE box per row. 3) The HIGHEST class checked is the preliminary corrosion class. 4) Complete Output Box (F) and return with attachments for finish review.

DECISION ENGINE

## Corrosion-Class Decision Matrix

Screening only. Check ONE box per row. The highest class checked is the preliminary corrosion class.

| Exposure factor                             | Class 1<br>Low                                    | Class 2<br>Moderate                                     | Class 3<br>High   | Class 4<br>Severe / Review   |
|---|---|---|---|--|
| <b>A. Distance from open sea / surfline</b> | <input type="checkbox"/> >10 km (>6 mi)           | <input type="checkbox"/> 2-10 km (1-6 mi)               | <input type="checkbox"/> <2 km (<1 mi)                          | <input type="checkbox"/> <=300 m / splash zone / offshore / harbor-front                 |
| <b>B. Salt spray / chloride exposure</b>    | <input type="checkbox"/> No known chloride source | <input type="checkbox"/> Occasional / seasonal chloride | <input type="checkbox"/> Frequent residue / coastal air         | <input type="checkbox"/> Direct wetting / heavy deposit / unknown level                  |
| <b>C. Wash-down / cleaning frequency</b>    | <input type="checkbox"/> None / dry service       | <input type="checkbox"/> <= monthly, fresh water        | <input type="checkbox"/> Weekly to monthly / wet-process nearby | <input type="checkbox"/> Daily / shift / high-pressure / chlorinated or caustic cleaners |
| <b>D. Chemical contact</b>                  | <input type="checkbox"/> None / incidental        | <input type="checkbox"/> Mild detergents                | <input type="checkbox"/> Intermittent chemicals                 | <input type="checkbox"/> Aggressive or unknown mix                                       |
| <b>Exposure type</b>                        | <input type="checkbox"/> Indoor, dry, controlled  | <input type="checkbox"/> Outdoor, sheltered / covered   | <input type="checkbox"/> Rooftop / fully exposed                | <input type="checkbox"/> Splash / standing water / condensation                          |
| <b>E. Target service life</b>               | <input type="checkbox"/> <10 years                | <input type="checkbox"/> 10-15 years                    | <input type="checkbox"/> 15-25 years                            | <input type="checkbox"/> >25 years / minimal maintenance                                 |

Preliminary corrosion class result (highest class checked):

Class 1  Class 2  Class 3  Class 4  
 Uncertain

Complete A-E in order. If site conditions are unknown, choose the higher-severity option or mark uncertainty and attach notes.

**REQUIRED INPUT**

**A. Distance from Sea**

Distance (straight line): \_\_\_\_\_ (km / miles)

Reference point:  Open sea / surfline  Harbor / port  Estuary  Brackish water

Notes / prevailing wind exposure: \_\_\_\_\_

**REQUIRED INPUT**

**B. Salt Spray / Chloride Exposure**

Chloride level:  None known  Occasional  Frequent  Direct wetting / splash  
 Chloride source(s):  Sea air  Sea splash  Road salt / de-icing  Process brine  Cooling tower drift  Other  
 Evidence (optional):  Salt residue observed  Corrosion observed nearby  Not sure

**REQUIRED INPUT**

**C. Wash-Down Frequency**

Frequency:  None  Monthly  Weekly  Daily / shift  
 Cleaning method:  Fresh water  Brackish water  High-pressure  Detergent  Chlorinated cleaner  Caustic / acid cleaner

Notes (chemicals / temperature if known): \_\_\_\_\_

**REQUIRED INPUT**

**D. Chemical Contact**

Contact level:  None / incidental  Mild detergents  Intermittent chemicals  Aggressive / unknown mix  
 Known chemicals (or attach SDS): \_\_\_\_\_

Contact type:  Splash  Spray / mist  Drips  Standing liquid  Fumes / condensation

**REQUIRED INPUT**

**E. Target Service Life**

Target service life: \_\_\_\_\_ years

Preference:  Lowest initial cost  Balanced  Lowest maintenance / long life  
 Maintenance access:  Easy to maintain  Difficult to maintain / limited shutdown access

PRELIMINARY DECISION AID - NOT A PROJECT COMMITMENT

## Recommendation Output (F)

**Preliminary corrosion class result:**  Class 1  Class 2  Class 3  Class 4  Uncertain

Preliminary recommended material route (tick one):

- Carbon Steel + HDG (hot-dip galvanized)
- SS304 (stainless steel)
- SS316 (stainless steel)
- Project-specific corrosion review required (final route pending site / chemical confirmation)

**Decision drivers (tick all that apply):**

Distance to sea  Chloride / salt spray  Wash-down frequency  Chemical contact  Target service life  Unknowns

**Review triggers:**

- Class 4 selected in any row
- Direct chloride wetting / splash
- Daily wash-down with chemicals
- Unknown chemical mix
- >25-year life / limited maintenance access

**Reviewer notes / conditions:**

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ORIENTATION ONLY

### Environment Examples

- Inland outdoor: ordinary weather exposure, no chloride source, no wash-down - typically Class 1-2.
- Rooftop exposed: high wet-dry cycling and wind-driven rain - often Class 2-3 depending on chlorides and washing.
- Coastal / chloride air or wash-down zone: salt residue risk and repeated wetting - often Class 3-4.

RETURN WITH FINISH REVIEW REQUEST

### Attachments & Submission

**Attachments suggested:**

- Site photos
- Sea-distance ref.
- Cleaning SOP
- Chemical list / SDS
- Spec notes

Email: [zjc@dtladders.com](mailto:zjc@dtladders.com)  
Subject: "Finish Review - Corrosion-Class Decision Sheet - [Project / Site]"

USE THIS SPACE FOR HANDWRITING AND FOLLOW-UP POINTS

### Notes / Constraints / Unknowns

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FILE BOUNDARY / DECISION NOTICE

### Decision Notice - Boundary of Use

This public decision sheet is for preliminary corrosion-route assessment only. Final material and finish selection depends on project engineering review, verified site conditions, exposure confirmation, and agreed scope of supply. Completing this sheet does not create a certified corrosion guarantee, coating warranty, or fitness-for-purpose certification.