

# Retouching exposed metal surfaces

## General

Section 8.1.2 of the IEC 61439-1 standard relating to low-voltage switchgear stipulates that manufacturers of switchgear combinations need to demonstrate the corrosion resistance of empty sheet steel enclosures.

Cut-outs in painted empty enclosures from Rittal for control panel components create exposed metal surfaces with the associated risk of corrosion.

These exposed cut edges require optimum retouching so as to subsequently ensure the level of corrosion protection stipulated in IEC 61439.

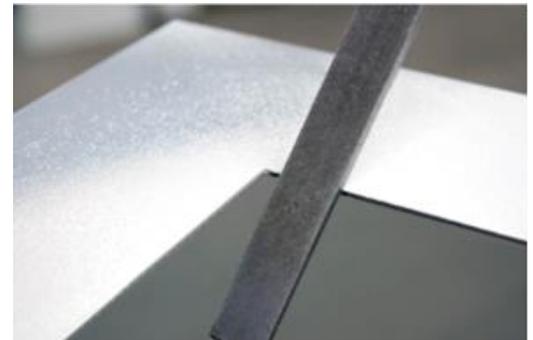
### Please note the following:

- Ideal ambient temperature during the painting process: +18°C to +25°C
- Primer drying time: 30 – 45 mins; drying time for RAL 7035 paint: 30 mins
- Instructions for use on the touch-up pen and spray can must be complied with
- The work instructions apply exclusively to Rittal enclosure systems and the primers and paints referred to

## Work instructions

### Step 1: Preparing the exposed metal surface

Use a metal file to remove any metal and paint residue from the exposed metal surfaces. Also ensure that sharp edges are carefully rounded off and deburred.



### Step 2: Cleaning

Use a lint-free cloth and an appropriate alcohol cleaner to remove any rust, grease, oil, etc. from the surface to be painted. Ensure careful cleaning of all corners and edges.



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### Step 3: Priming

#### Option 1:

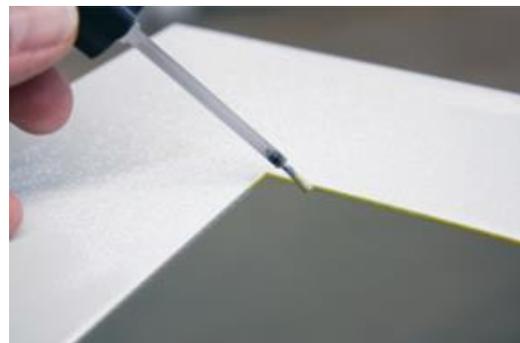
Rittal primer pen, Model No.: 2436.800

Shake the primer pen vigorously for 1 – 2 minutes prior to use (ink mixer impact must be audible). Use the brush to apply the primer evenly over the whole of the areas to be painted.

#### Option 2:

Rittal primer can, Model No.: 2438.800

Stir the primer vigorously for 1 – 2 minutes prior to use. Use a brush to apply the primer evenly over the whole of the areas to be painted.

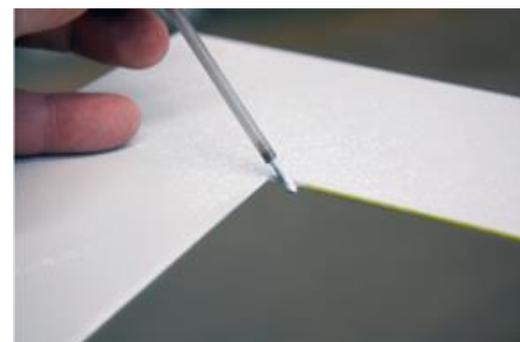


### Step 4: Painting/colour: RAL 7035

#### Option 1:

Rittal touch-up pen, Model No.: 2436.735

Shake the touch-up pen vigorously for 1 – 2 minutes prior to use (ink mixer impact must be audible). Use the brush to apply the top coat evenly over the whole of the areas to be painted. The primer must no longer be visible once the top coat has been applied.



#### Option 2:

Rittal spray can, Model No.: 2440.735

Use adhesive masking tape to carefully cover all areas that are not to be painted. Shake the spray can vigorously for 1 – 2 minutes prior to use (from time impact of mixing balls can be heard). It is advisable to perform initial test spraying to ensure optimum results. Apply the top coat evenly over the whole of the areas to be painted, spraying in a criss-cross pattern. The recommended spraying distance is 25 cm. The primer must no longer be visible once the top coat has been applied.

