

## Instructions for disassembly/ component extraction of Hunter Douglas Metal Ceilings

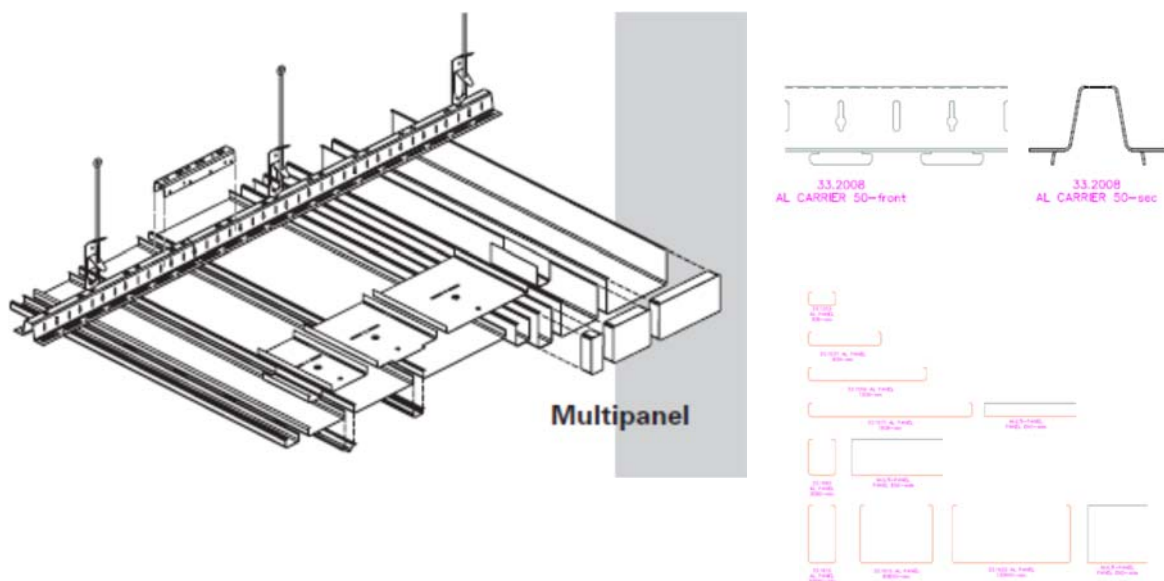
### 1.0 Introduction

Hunter Douglas Metal Ceilings are a well-known and established product in the construction business. We have composed this document to provide answers to possible questions raised concerning issues related to disassembly and extraction of individual components.

### 1.1 Fixings and connections

Hunter Douglas Ceilings are designed for easy demountability with only mechanical connections between all individual components (top to bottom):

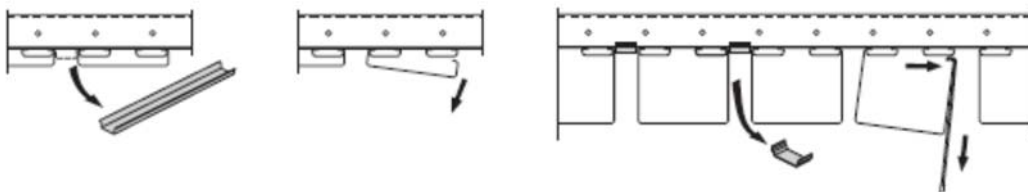
- Fixings to the structural ceilings are not part of the supply package but in most cases comprise of plugs inserted into a hole in the concrete and a screw/ bolt inserted into the plug
- Galvanised steel hanger wires are mechanically fixed by a screw/ bolt going into the plug
- Galvanised steel suspension springs slide over the hanger wire and clamp themselves tight without any fixing
- Arrow-shaped ends of the suspension springs fit into holes in the upper flanges of the aluminium/steel panel carriers
- Aluminium/steel carriers are connected with each other in a longitudinal direction by aluminium carrier splices that snap on top of the carriers. The actual fixing is done by small lips that fit into holes punched in the carrier sides.
- Aluminium/steel panels are clipped onto prongs punched out of the aluminium/steel carriers. The aluminium/steel panels have flanges that hook onto the prongs of the carrier.



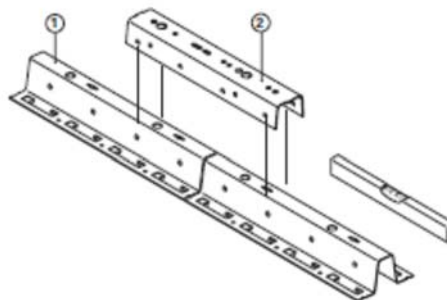
## 2.0 Disassembly

Disassembly is executed bottom-up and does not require any tools (with the exception of the top fixing):

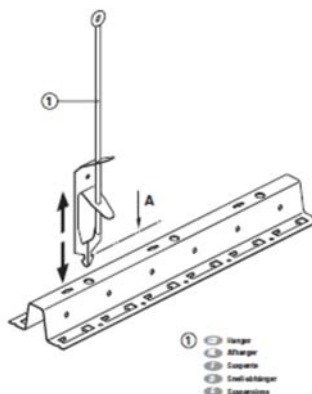
- Join profiles (optional) are removed by pulling them out of the joint.
- Panels are removed by:
  - removing locking clips from between the panels (optional)
  - unclipping one of the panel edges from the prongs of the carrier
  - and then removing the panel from the prong.



- Carrier splices are removed by squeezing the vertical flanges of the carrier just below the carrier splice until the lips in the splice disengage from the holes in the carrier side. The splice can then be easily lifted off.



- The legs at the bottom of the suspension springs are slightly offset against each other. By squeezing the legs together, the arrow-shaped ends will disengage from the hole in the carrier. Repeat over the length of the carrier. The carrier can now be removed from the ceiling.



- By squeezing the oblique legs at the top of the suspension spring together, the spring can be slid down from the hanger wire
- The hanger wire is removed by unscrewing the screw/ bolt from the plug in the concrete.

### 2.1 Component extraction

All components are singular elements, not bonded/ fixed to any other element and can be extracted without any problems. When the disassembly is executed with proper care, all components can be extracted for future (re-) use. Obviously all components can be fully recycled but that is the least preferred option.

### 2.2 Reuse and cleaning

In general the individual components do not require refurbishment and can be reused as is. One point of consideration is that the Hunter Douglas Linear Metal panels are made to order for specific projects. For that reason it is possible that lengthwise the panels may not fit directly into a new location/ project. However, the panels are easily cut by hand to be made to fit.

To maintain visual (and technical) quality, the individual components may require cleaning. If so desired, all metal components can be wet cleaned with water and a mild, neutral (pH=7) detergent. One shall be careful to avoid heavy rubbing to prevent scratching of the surface. Always test the intended cleaning agent on a non-visible part of a panel before commencing cleaning.

### 3.0 Material contamination

As mentioned above, all components are singular elements. However, most of the components do have surface treatments/ conservations (i.e. galvanisation or paints).

Products	Material	Surface treatment
Hanger wire	DX51 D+Z	3μ electroplated zinc coating
Suspension spring	Ck-60-HA	3μ electroplated zinc coating
Aluminium Carrier	EN AW5050	20μ polyester paint (black)
Steel Carriers	HX260LAD+Z100 MB - O (L. g)	20μ polyester paint (black)
Carrier splice	EN AW5050	20μ polyester paint (black or transparent)
Hunter Douglas Aluminium plain panel	EN AW5050	30μ polyester paint
Hunter Douglas Steel plain panel	DX51 D+Z	30μ polyester paint
Hunter Douglas Aluminium perforated panel + non-woven	EN AW5050	30μ polyester paint (front) 0.2mm glass fibre tissue, Viledon C1986SP (back side)
Hunter Douglas Steel perforated panel + non-woven	DX51 D+Z	30μ polyester paint (front) 0.2mm glass fibre tissue, Viledon C1986SP (back side)