

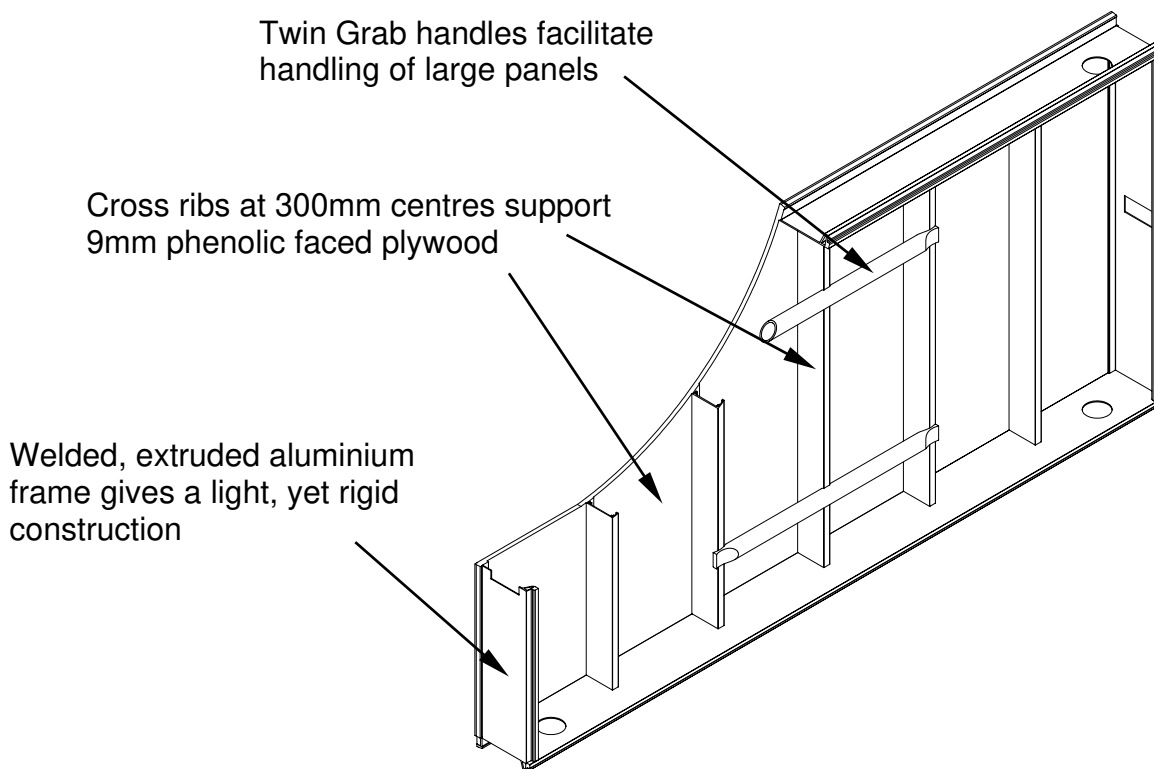
## LIGHTWEIGHT SOFFIT SYSTEM

### Introduction

RMD Kwikform Airodek soffit falsework is a lightweight modular system developed to provide the most rapid equipment turnaround possible with the minimum number and weight of components. Airodek provides an F2 soffit finish and supports concrete slabs up to 450mm thick.

All components are under 25kg making for ready man handling.

**The maximum concrete slab thickness that can be supported is 450mm. The maximum additional live load is 2.0kN/m<sup>2</sup>.**



Support to the panels is afforded by Airodek Props at the panel corners. This variant is known as the 'Prop and Panel' system. A drop head version will be launched in 2003 and is referred to as the 'Beam and Panel' system.

Airodek equipment is for use in **fixed at the head** applications only. For a full explanation of the stability requirements to ensure this condition refer to Applications Section 2.

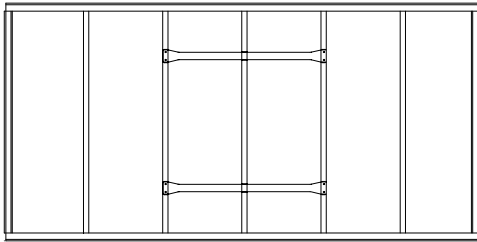
TECHNICAL DATA

## LIGHTWEIGHT SOFFIT SYSTEM

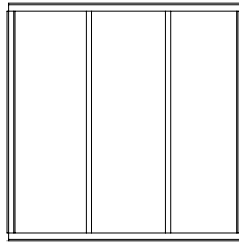
### 1.1 Airotek Panels

Airodek Panels are manufactured from a welded, lightweight, powder coated, aluminium extruded frame and have a 9mm phenolic plywood face for a smooth concrete finish and a long and maintenance free life.

1800 x 900



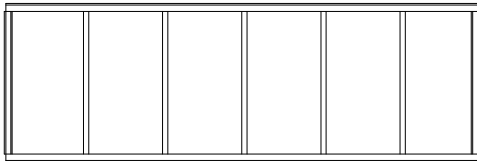
900 x 900



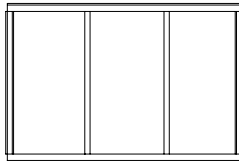
150



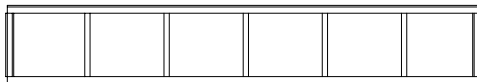
1800 x 600



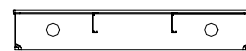
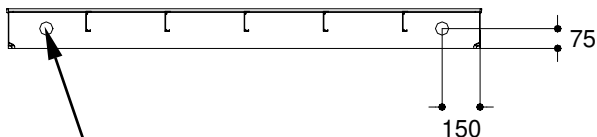
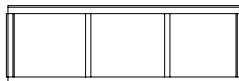
900 x 600



1800 x 300



900 x 300



60 x 30mm holes  
mate with the  
Airodek  
Temporary Prop

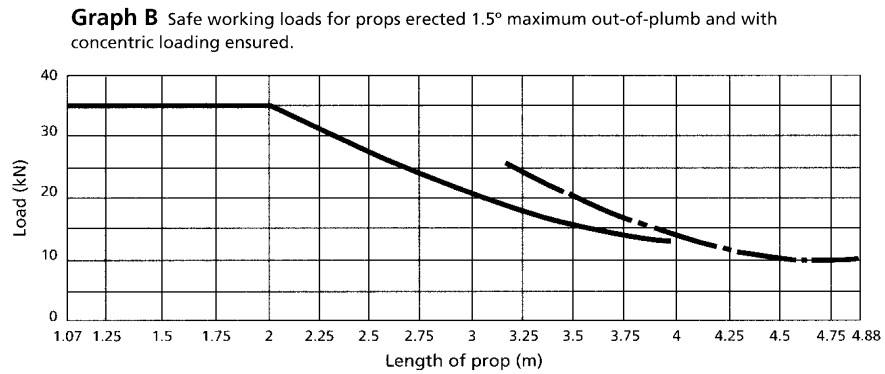
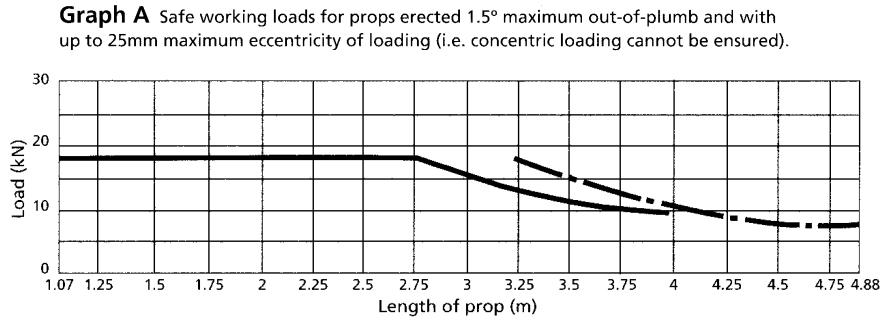
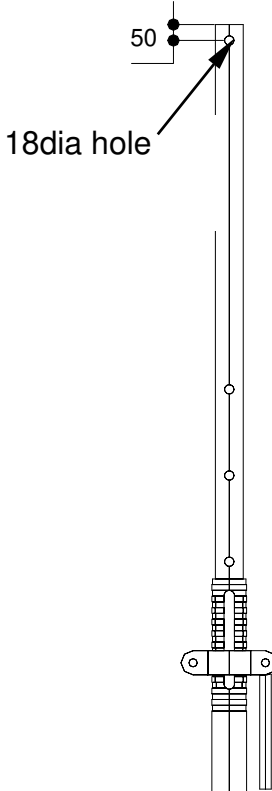
50mm diameter holes for  
use with the Airodek  
Cantilever Unit

Code	Description	Weight
02040	Airodek Panel 1800 x 900	24.9 kg
02041	Airodek Panel 1800 x 600	18.4 kg
02042	Airodek Panel 1800 x 300	12.7 kg
02043	Airodek Panel 900 x 900	13.2 kg
02044	Airodek Panel 900 x 600	9.9 kg
02045	Airodek Panel 900 x 300	6.7 kg

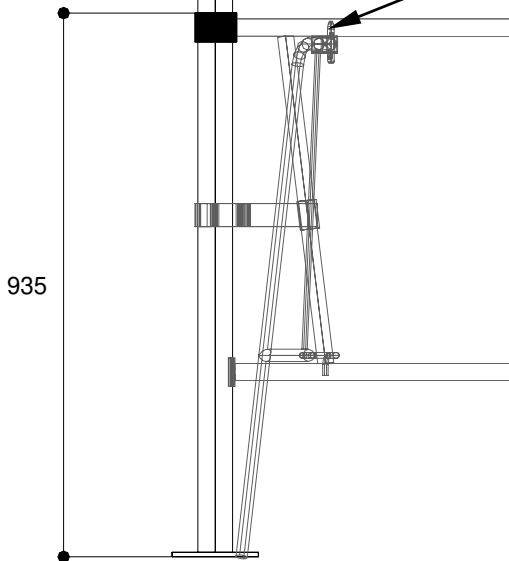
## LIGHTWEIGHT SOFFIT SYSTEM

### 1.2 Airotek Props

Used to support the Airotek Panels and Infill Beams



Position Spacing Gates at this level (orange band on prop) when Spacing Gate Legs are used



#### Overall Length

- Size 1** 1.75 – 3.12m
- Size 2** 1.98 – 3.35m
- Size 3** 2.59 – 3.95m
- Size 4** 3.20 – 4.87m

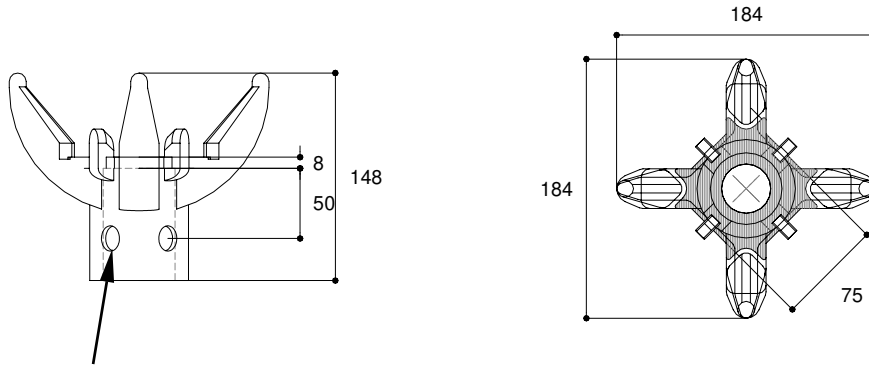
Code	Description	Weight
02052	Size 1 Airotek Prop	22.7 kg
02053	Size 2 Airotek Prop	23.6 kg
02054	Size 3 Airotek Prop	26.3 kg
02055	Size 4 Airotek Prop	35.6 kg

## LIGHTWEIGHT SOFFIT SYSTEM

### 1.3 Aluminium Crown (Code 02049) weight 1.1kg

Used to support and locate the Airodek Panels on the top of the Airodek props until March 2003 when 02080 will supersede this item.

**Allowable Working Load 22kN evenly placed**

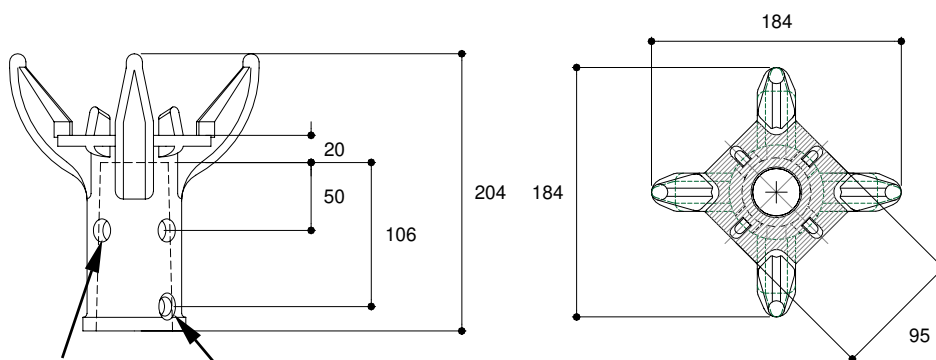


17 diameter hole mates with Airodek 'D' pin

### 1.4 Heavy Duty Crown (Code 02080) weight 1.2kg

Used to support and locate the Airodek Panels on the top of the Airodek props post March 2003. (Will also be used with the Airodek Beam and Panel system, to be launched 2003)

**Allowable Working Load 60kN evenly placed**



17 diameter hole mates with Airodek 'D' pin

14 diameter hole mates with Rapidshor jack spring retainer

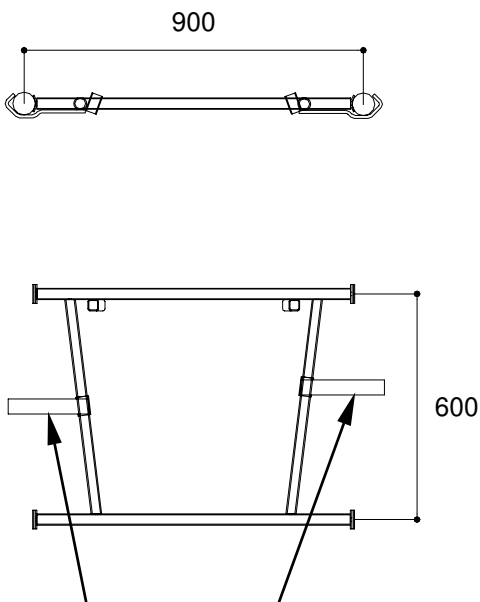
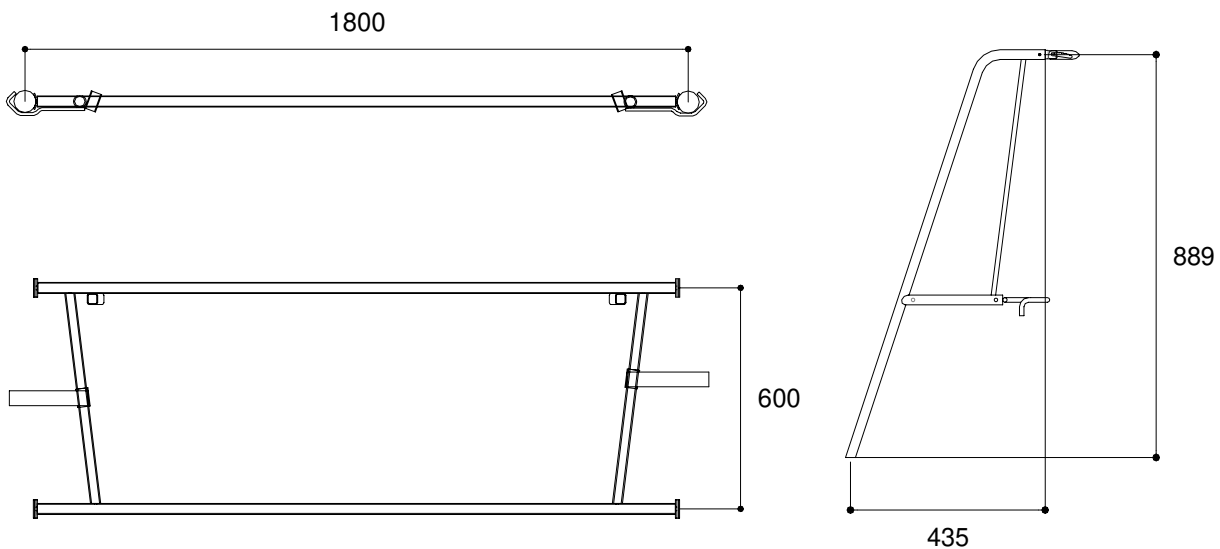
TECHNICAL DATA

## LIGHTWEIGHT SOFFIT SYSTEM

### 1.5 Spacing Gates and Legs

Used to stabilise the falsework during the erection stage.

Use a continuous line of spacing gates with two Spacing Gate Legs attached to every other gate for the first row of Airodek Props erected. Use single spacing gates in both directions at 5.4m centres thereafter.



Drive latches gently downward to tighten gate/prop connection

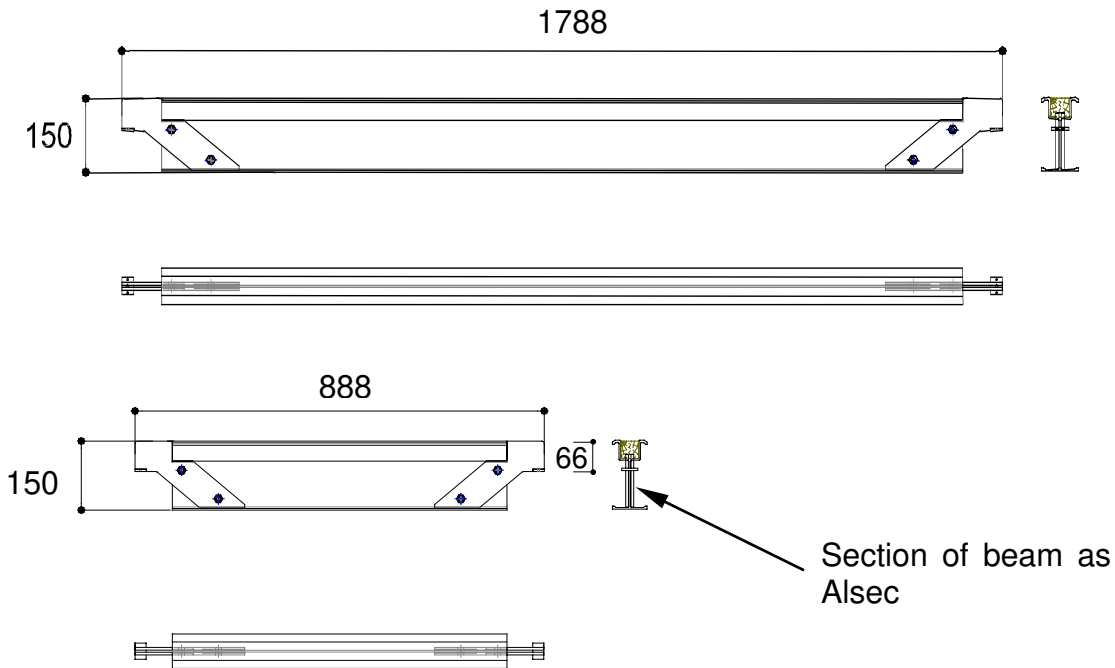


Code	Description	Weight
02062	Airodek Spacing Gate 1.8	15.0 kg
02063	Airodek Spacing Gate 0.9	11.4 kg
02064	Airodek Spacing Gate Leg	2.45kg

## LIGHTWEIGHT SOFFIT SYSTEM

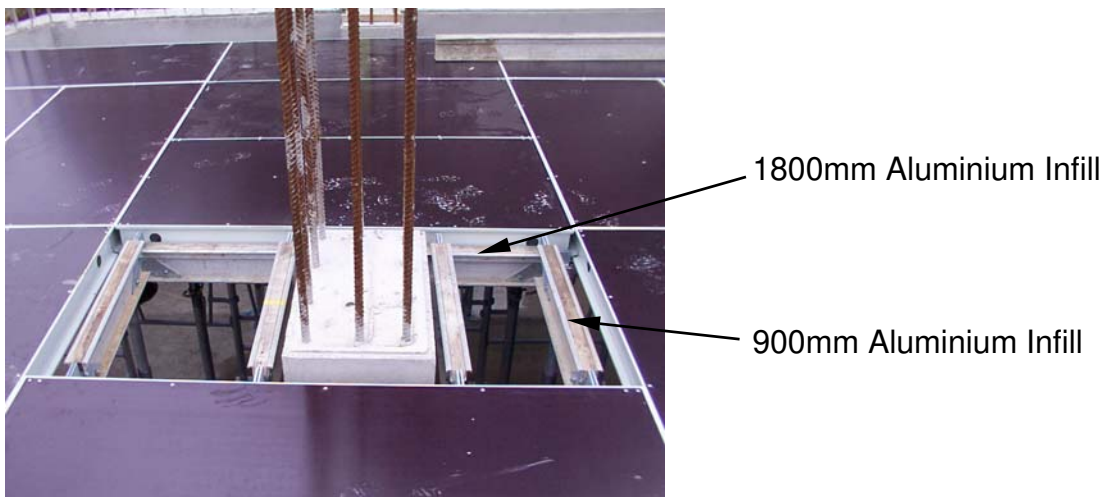
### 1.6 Aluminium Infill Beams

Used to fill around columns and to support one edge of infills against walls.



**Allowable End Reaction 12kN.**

**Allowable Bending Moment 7kNm.**

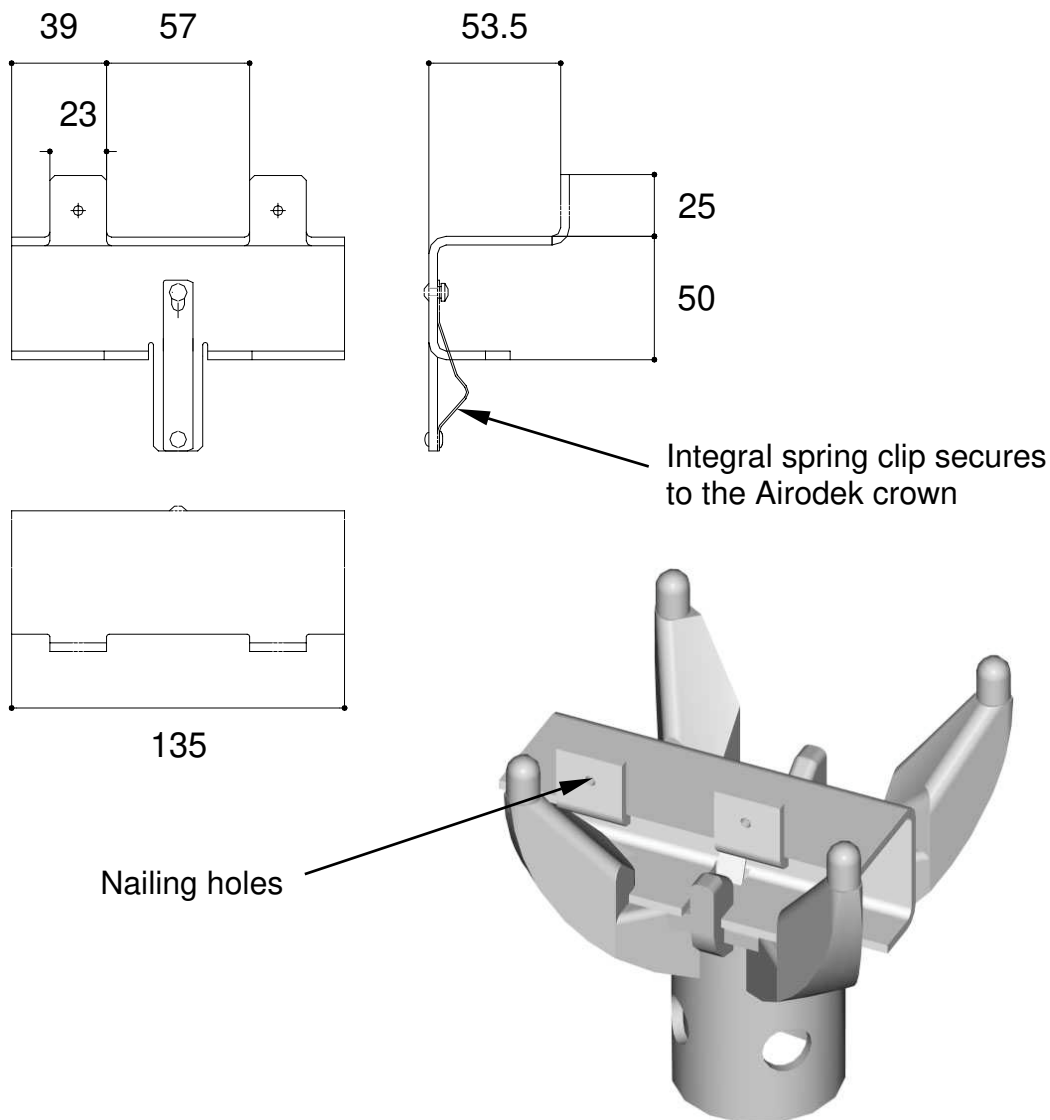


Code	Description	Weight
02068	Airodek Aluminium Infill 1800	9.91 kg
02069	Airodek Aluminium Infill 900	6.52 kg

## LIGHTWEIGHT SOFFIT SYSTEM

### 1.7 Prop Head Timber Support (Code 02078) weight 0.49kg

A small steel item that sits in the Airodek Crown and may be used to support an 82x47mm timber runner below 18mm plywood infills.



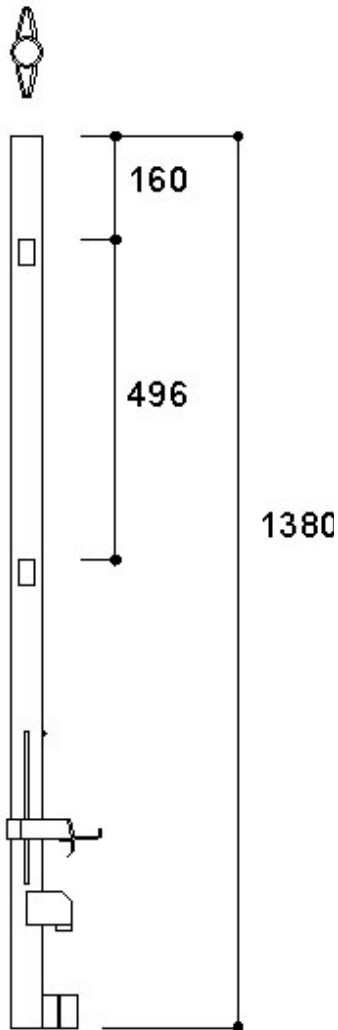
Note: The Prop Head Timber Support does not mate with the Airodek Heavy-Duty Crown when used with a Rapidshor Jack.

## LIGHTWEIGHT SOFFIT SYSTEM

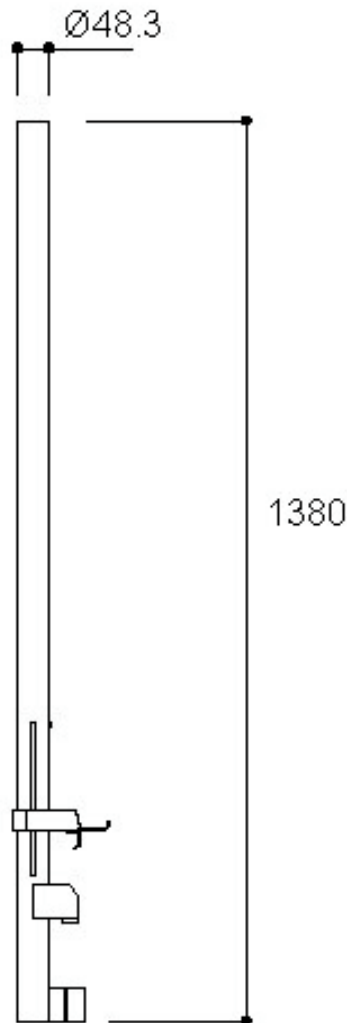
### 1.8 Edge Protection

Attach simply to the top of the Airodek Props and Panels to provide a guardrail post wherever required. Available in two variants, the 'V' post accepts Kwikstage Access Ledgers or Shoring Tie guardrails. Use the 'T' post with tube and fitting guardrails (preferred).

'V' Post



'T' Post



Use Toeboard Clip (Code 04160) to secure toeboard



Code	Description	Weight
02060	Airodek 'V' Handrail Post	10.5 Kg
02061	Airodek 'T' Handrail Post	10 kg

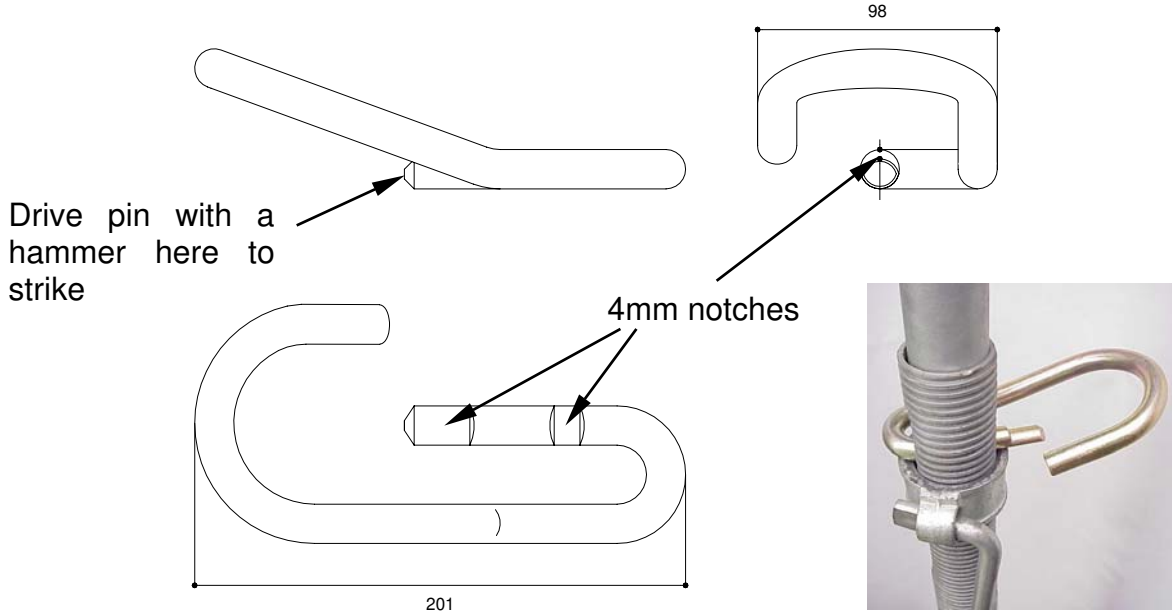


## LIGHTWEIGHT SOFFIT SYSTEM

### 1.9 Airodek Prop Pin (Code 02050) weight 0.8kg

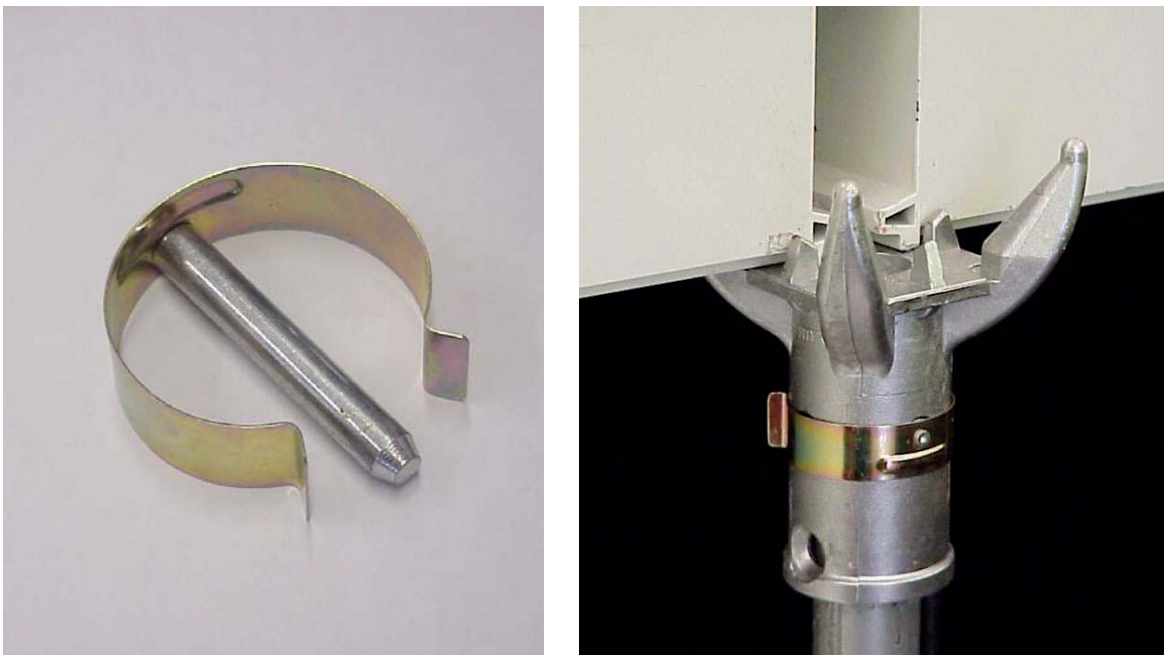
Supplied integral with the Airodek Prop and used to fix the unit to length. Also used to provide an initial load release during soffit stripping.

AWL 22kN



### 1.10 Rapidshor Omega Clip (Code 02880) weight 0.10kg

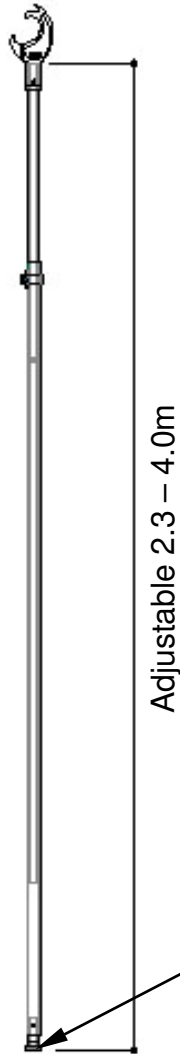
Used to secure the Airodek Crown to the top of the Airodek Prop



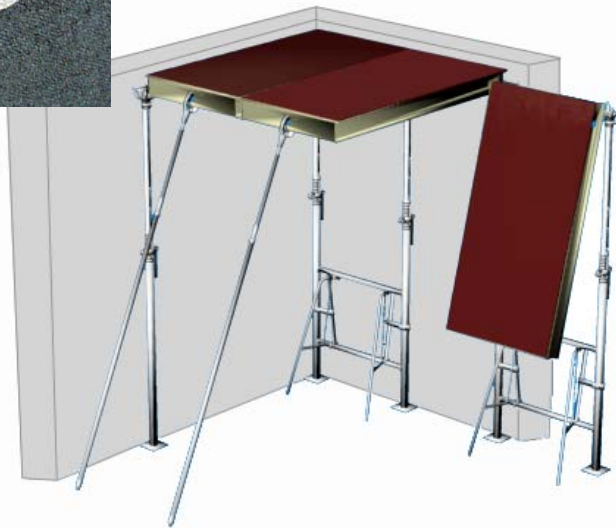
## LIGHTWEIGHT SOFFIT SYSTEM

### 1.11 Temporary Prop (Code 02051) weight 4.43kg

Used at an angle of approximately 25 degrees to support one end of the Airodek Panels temporarily prior the erection of the Airodek Props.



The Temporary prop claw prevents the unit from becoming accidentally detached from the Airodek Panel, even if the base of the prop slips



Rubber foot prevents the base of the unit slipping on the ground during use

## LIGHTWEIGHT SOFFIT SYSTEM

### 1.12 Airodek Panel Strap (Code 09876) weight 0.024kg

A nylon cable tie used to secure the panels to the support structure during conditions of high wind. Maximum circumference 650mm **AWL 0.57kN**

Left hand picture shows connection of panel to crown. Right hand picture shows connection of panel to panel.



### 1.13 Handling Airodek Panels

Airodek Panels are delivered as shown with Airodek Web Straps used to band 10 panels to an Airodek Pallet. Secure panels as shown before crane handling panels to the next lift. Use a manual pallet truck to transport pallets on one level.



Customer's lifting accessories

6m Web Strap with Ratchet

8m Web Strap with Ratchet

Code	Description	Weight
02095	Airodek Pallet	36.5 kg
02091	6m Web Strap with Ratchet	1.75 kg
02092	8m Web Strap with Ratchet	2.00 kg

## 2.0 Applications

### 2.1 Stability

During erection the equipment is stabilised by the fitting of Airodek Spacing Gate Frames and Airodek Spacing Gate Frame Legs.

During all subsequent stages the equipment requires adequate **fixity at the head**. This means that the system is not free standing when loaded. Stability is provided at the top of the system by the soffit infill plywood being trimmed around the column heads and/or walls.



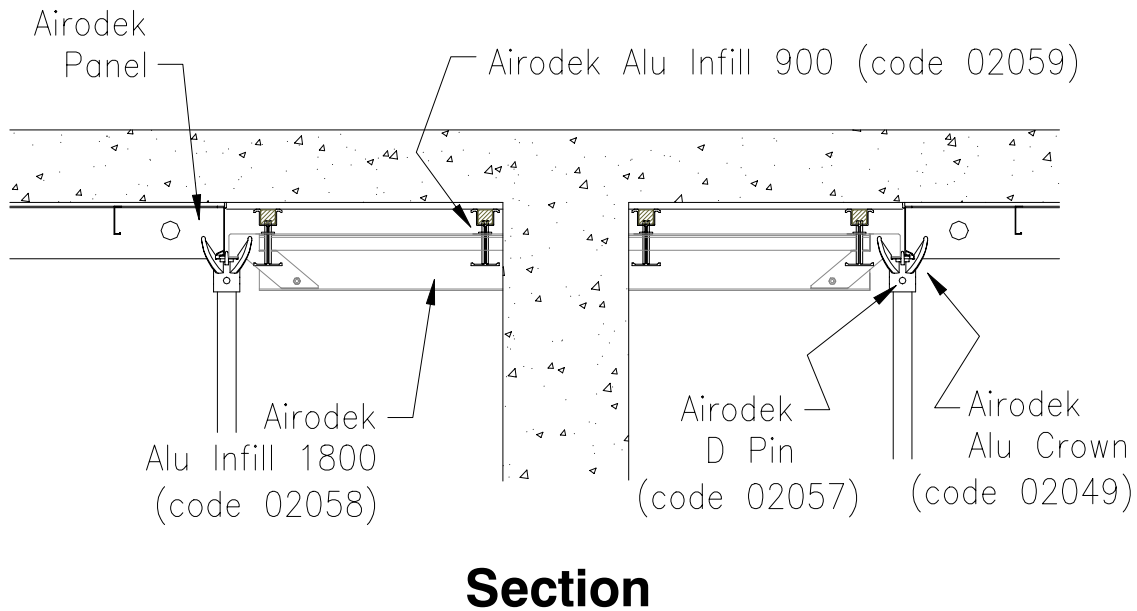
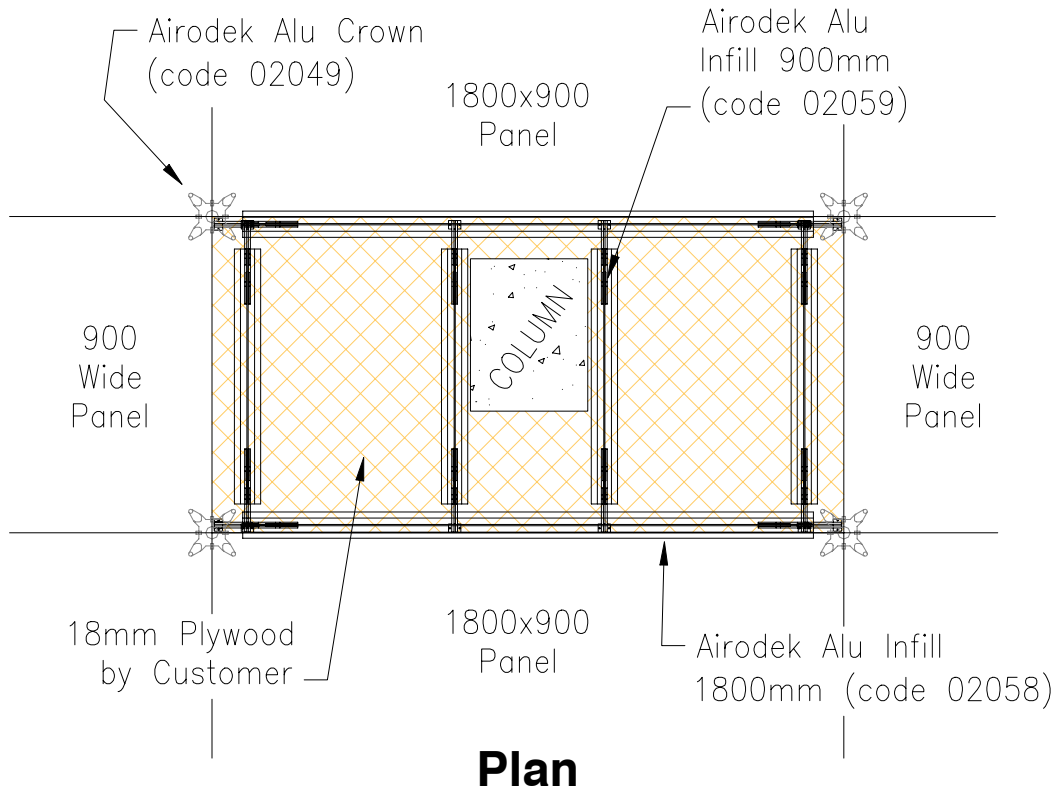
It is the customer's responsibility to ensure that the permanent works and the interface with the soffit, as constructed on site, can resist and safely transfer all notional and actual horizontal loads to prevent the equipment falling over.

### 2.2 Erection Guidance

For detailed erection guidance for the Airodek Prop and Panel system refer to RMDK Erection Guidance Note F4. This and the attendant Application Risk Assessment are available from your local RMDK Branch or Technical Office

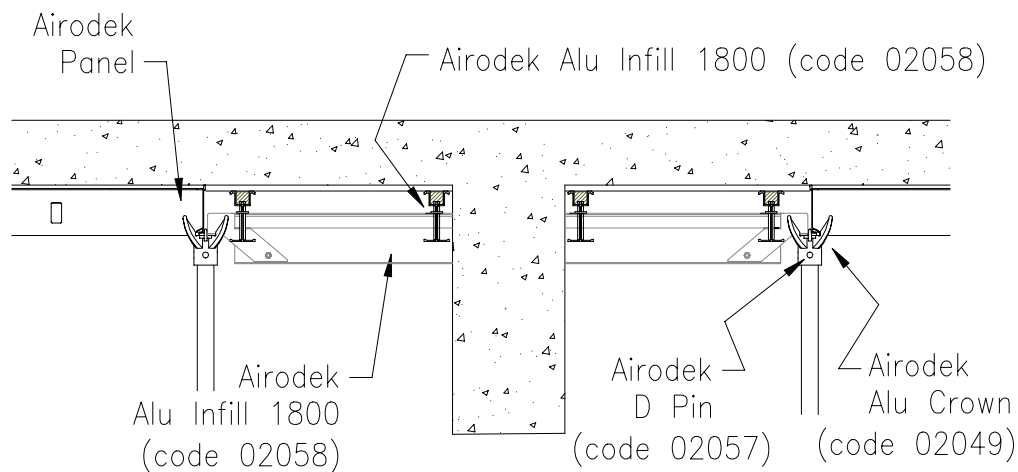
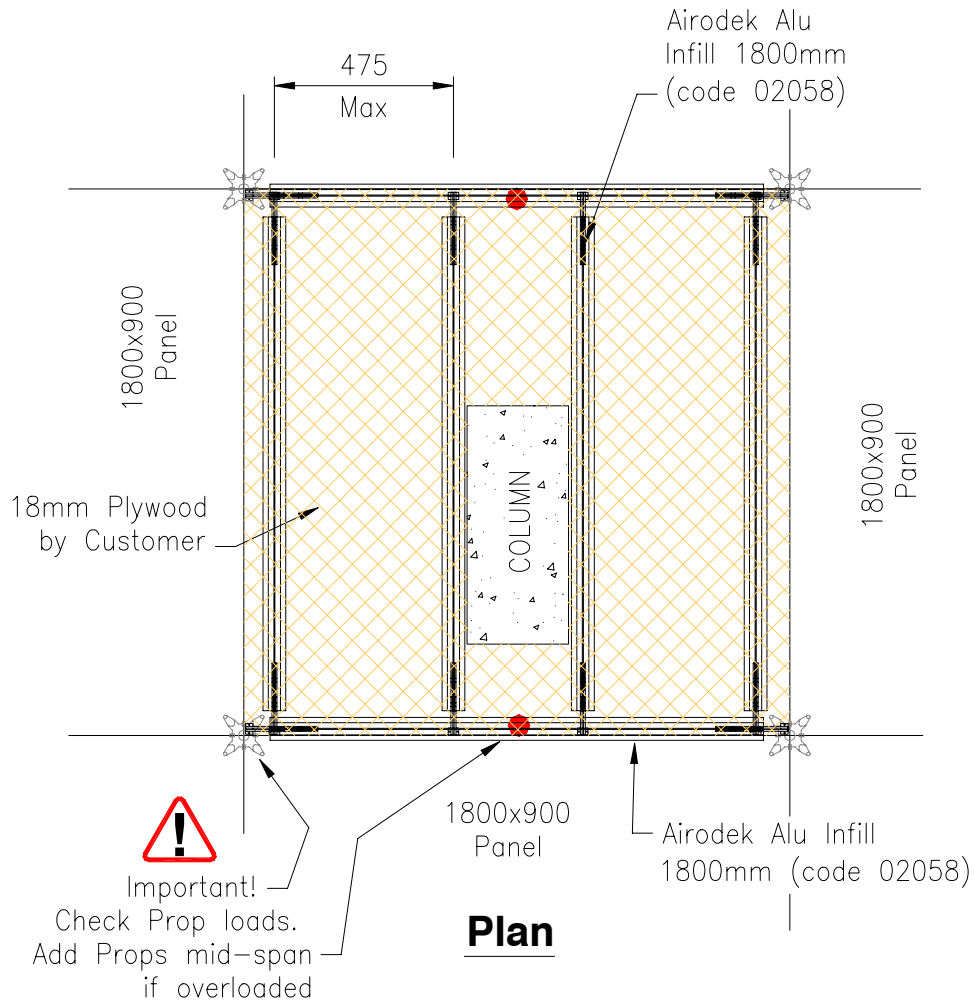
## LIGHTWEIGHT SOFFIT SYSTEM

### 2.3 Infill at Columns Falling in One Panel



## LIGHTWEIGHT SOFFIT SYSTEM

### 2.4 Infill at Columns Falling in Two Panels



### **Section**

TI 02/50

Version

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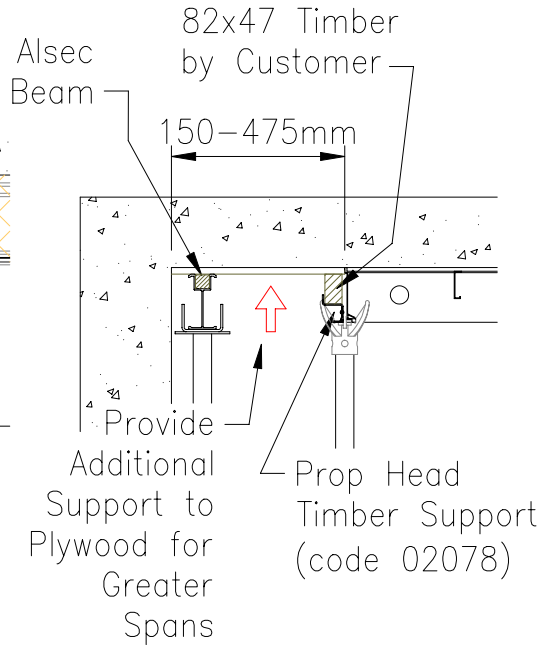
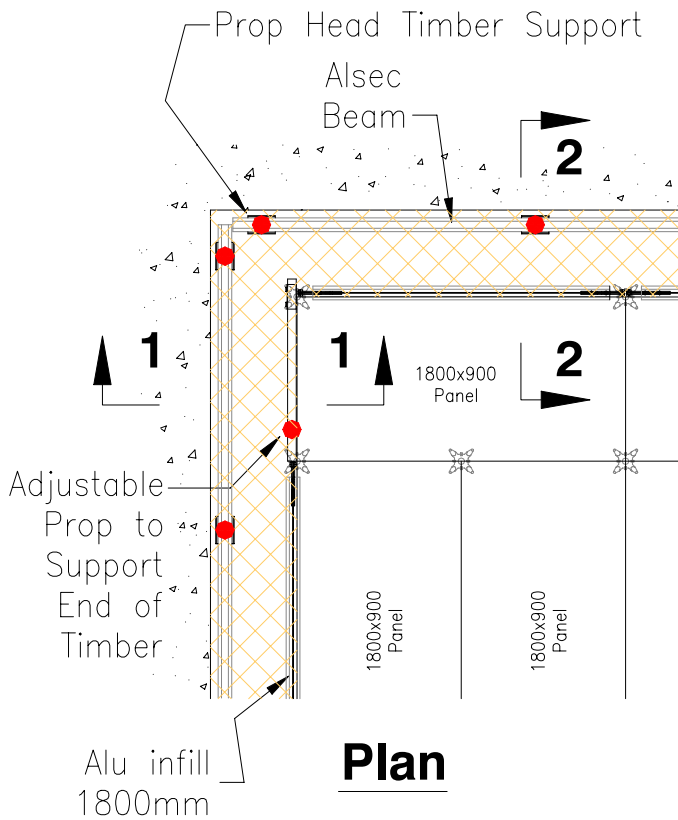
Further info: +44(0) 1922 743743

Sheet 1 of 1

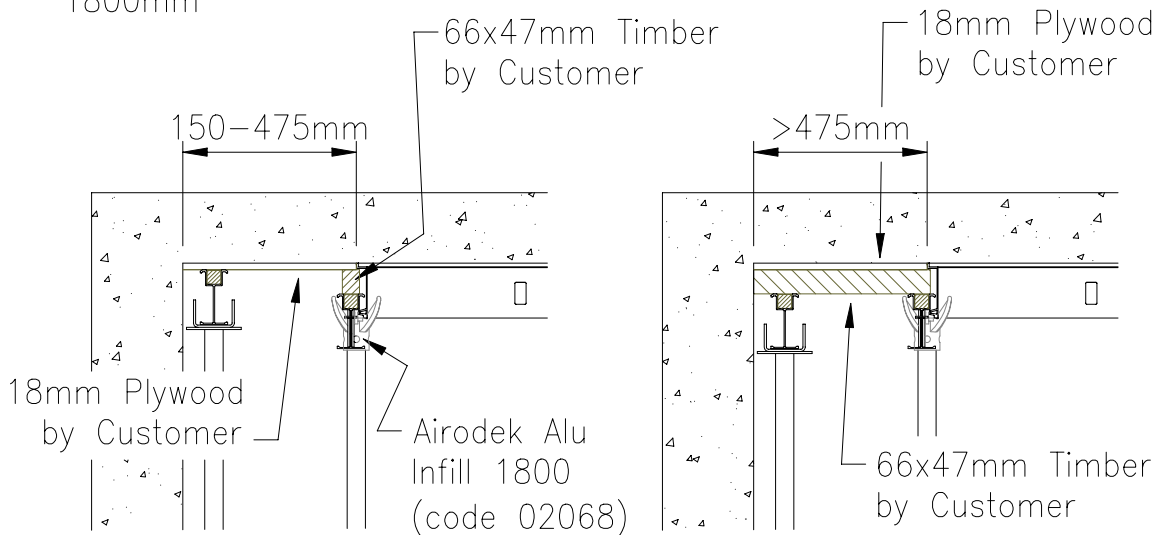
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## LIGHTWEIGHT SOFFIT SYSTEM

### 2.5 Infill at Perimeter Walls



**Section 1-1**



**Section 2-2**

**(Spans 150-475mm)**

**Alternative Section 2-2**

**(Spans >475mm)**