

RONDO  
**RAPID**<sup>®</sup>  
Drywall Grid System



RONDO RAPID  
DRYWALL GRID SYSTEM  
DESIGN MANUAL

SEPTEMBER 2016

**RONDO**<sup>®</sup>

# RONDO CEILING SYSTEMS SOLUTIONS

Rondo supplies a wide range of ceiling systems that provide a high-quality structure for creating visually appealing spaces within buildings.

**KEY-LOCK® CONCEALED CEILING SYSTEM:**

Our most popular and superior ceiling system. It produces a high-quality structure that has the ability to hold multiple layers of board, can be used in both fire-rated and non-fire-rated environments, as well as being suitable for acoustic and seismic designs.

**WALK-ABOUT TRAFFICABLE CEILING SYSTEM:**

Our strongest ceiling system. It provides a framework onto which a trafficable platform can be installed in the plenum area above ceilings, for safe and secure access to services.

**STEEL STUD CEILING SYSTEM:**

Incorporates our Steel Studs as ceiling joists, which can be used in situations where services and the like make it difficult to install a suspended ceiling, such as corridors, bathrooms etc.

**DUO® EXPOSED GRID CEILING SYSTEM:**

Expertly engineered for fast assembly on site, Cross Tees positively lock into each other through the Main Tee to create a sturdy ceiling system. Seismic Designs that have been fully tested to meet code requirements are available.

**ALUMINIUM EXPOSED GRID CEILING SYSTEM:**

The Aluminium Main Tee and Cross Tee intersection is a butt joint which provides a flat, ghost free surface into which the ceiling tiles are fitted.

	CONCEALED OR EXPOSED GRID	DIRECT FIX OR SUSPENDED CEILING APPLICATIONS	FIRE-RATED APPLICATIONS	ACOUSTIC DESIGNS AVAILABLE	SEISMIC DESIGNS AVAILABLE	BULKHEAD DESIGNS AVAILABLE
KEY-LOCK®	Concealed	Direct-Fix & Suspended	Yes	Yes	Yes	Yes
WALK-ABOUT	Concealed	Suspended	—	—	Yes	—
RAPID®	Concealed	Direct-Fix & Suspended	—	—	—	Yes
STEEL STUD	Concealed	Direct-Fix	Yes	—	Yes	Yes
DUO®	Exposed	Direct-Fix & Suspended	—	—	Yes	Yes
ALUMINIUM	Exposed	Suspended	—	—	—	—

# RONDO RAPID® DRYWALL GRID SYSTEM

Rondo RAPID® is a lightweight grid system that is fast and simple to install and can be used in a variety of applications such as suspended or direct-fix ceilings, curved ceilings, bulkheads and wall applications.

Designed to accommodate air conditioning services and light fixtures, the Rondo RAPID® Drywall Grid System can achieve spans of up to 1600mm without the use of suspension hangers, making it ideal for corridors and the like.

## SUITABLE FOR

- Lightweight concealed plasterboard ceilings
- Direct fix or fully suspended applications
- Curved plasterboard ceilings
- Seamless transitions from a concealed to exposed grid system
- Bulkheads, including multiple steps and curved
- Corridors
- Non-fire rated systems
- Wall applications

## SPECIAL FEATURES

- Surface Finish: Z275 galvanised
- Low profile with 38mm Wide Face
- Integration with Rondo DUO® Exposed Grid Ceiling System
- Simple Integration of air conditioning services
- Main Tee and Cross Tee clips have a secure connection and are easy to remove and relocate

## IMPORTANT NOTE:

***Rondo recommends its products and systems are installed by a qualified tradesperson and according to the relevant codes and standards.***

***Rondo recommends that before acting on any advice or opinion in this manual, you should seek professional advice in light of your own architectural and building requirements.***

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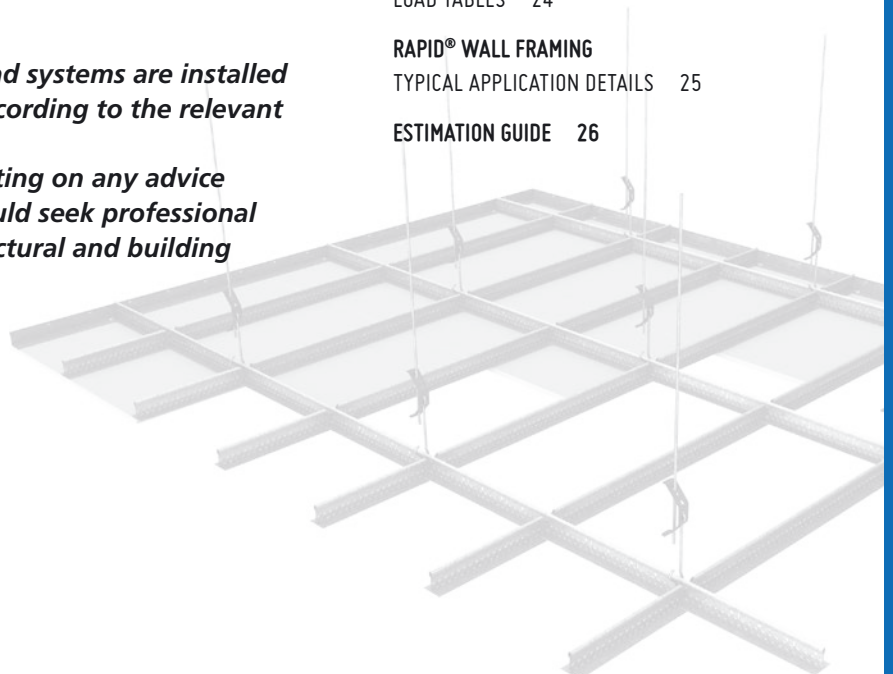
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# RONDO RAPID® COMPONENTS

## PRIMARY SECTIONS: FOR FLAT & CURVED CEILINGS

RAP1	38 x 38mm Main Tee
RAP2	38 x 38mm Cross Tee

## WALL TRACKS/TRIMS

RAP6	40 x 38mm Wall Track
RAP7	32 x 32mm Locking Wall Trim
RAP8	32 x 32mm Wall Trim

## TRANSITION CLIPS

RAPA10	10mm Plasterboard Transition Clip with Locking Tabs
RAPA13	13mm Plasterboard Transition Clip with Locking Tab
RAPA16	16mm Plasterboard Transition Clip with Locking Tabs
RAP22	Tee / Transition Trims Roll in Joiner Clip
RAP23	Transition Clip to suit 45/50 Top Hats and 13mm Plasterboard

## DIRECT FIX BRACKETS

RAP26	Direct Fix Angle Bracket – 180 x 40mm
RAP27	Direct Fix Angle Bracket – 120 x 40mm
RAP28	Direct Fix Extension Strip – 180mm
RAP29	Direct Fix Angle Bracket – 180 x 50mm

## PRIMARY SUSPENSION HANGERS

RAP31	Main Tee Suspension clip for 2.5 or 5mm rod
RAP32	Small Side Fix Main Tee Suspension Clip for 2.5 or 5mm rod
RAP33	Main Tee 6mm Threaded Rod Suspension Clip

## ACCESSORIES: FLAT CEILINGS

RAP36	Main Tee/Cross Tee Intersection Joiner
RAP37	Up Tight Clip for Direct Fix Applications

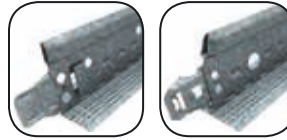
## ACCESSORIES: CURVED CEILINGS

RAP41	Main Tee Radius Cut Out Support Clip
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## SUSPENSION RODS & NUTS

121	5mm Soft Gal Suspension Rod
122	M6 6mm Threaded One End Rod
826	M6 Nuts to suit 122-123
120	2.5mm Soft Gal Wire

## PRIMARY SECTIONS



RAP1

RAP2

## WALL TRIMS



RAP6

RAP7

RAP8

## TRANSITION CLIPS



RAPA  
10, 13, 16

RAP22

RAP23

## DIRECT FIX CLIPS



RAP26

RAP27

RAP28

RAP29

## PRIMARY SUSPENSION HANGERS



RAP31

RAP32

RAP33

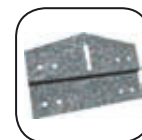
## ACCESSORIES: FLAT CEILINGS



RAP36

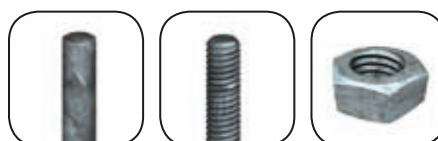
RAP37

## CURVED CEILINGS



RAP41

## SUSPENSION ROD & NUTS



121

122

826

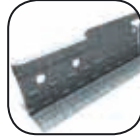
**BULKHEAD COMPONENTS**

RAP46	Bulkhead Main Tee
RAP47	Bulkhead/Corridor Main Tee Strongback
RAP48	30° Bulkhead Angle Joiner
RAP49	45° Bulkhead Angle Joiner
RAP50	60° Bulkhead Angle Joiner
RAP51	90° Bulkhead Angle Joiner

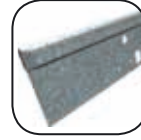
**CORRIDOR COMPONENTS**

RAP56	Corridor Main Tee
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**BULKHEAD COMPONENTS**



RAP46



RAP47



RAP48



RAP49

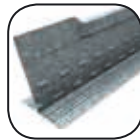


RAP50



RAP51

**CORRIDOR COMPONENTS**

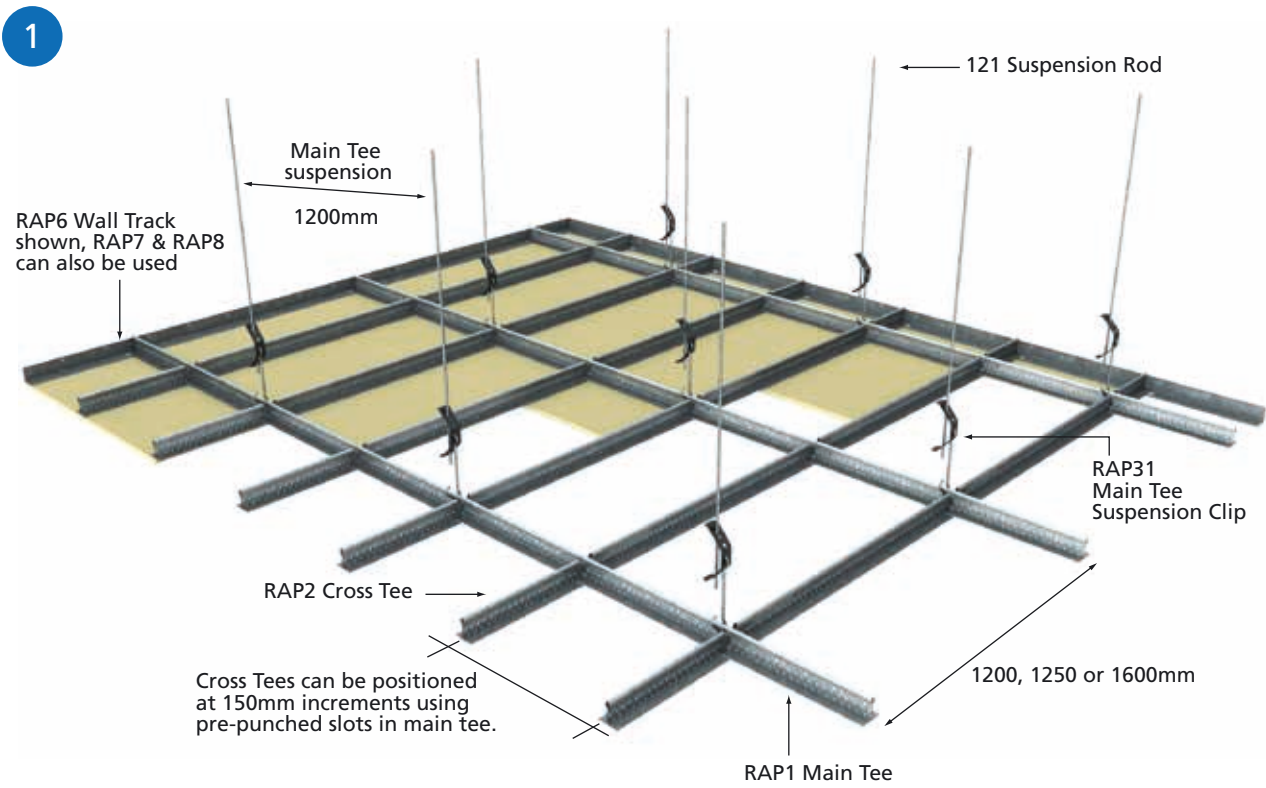


RAP56

# FLAT CEILING SYSTEM

The Rondo RAPID® Drywall Grid System is a simple two-way concealed ceiling grid system that is designed to achieve a flat, flush plasterboard ceiling finish.

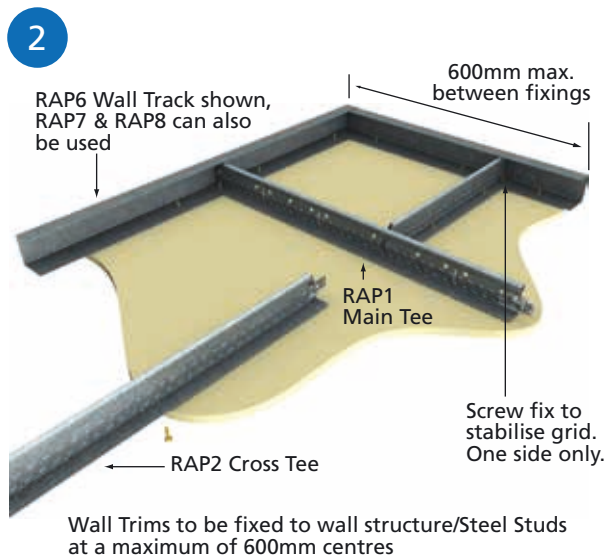
The system includes Main Tee and Cross Tees, along with complementary accessories and can be suspended or directly fixed to the structure above.



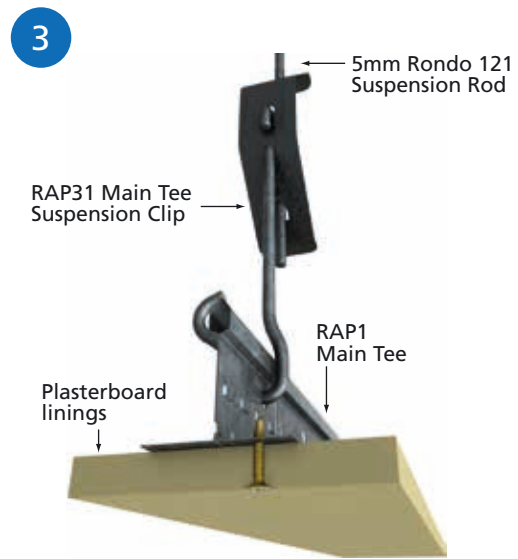
NOTE: When using 1600mm long Cross Tees, Main Tee suspension must be at 900mm centres.

■ RONDO RAPID® TYPICAL FRAMING DETAILS

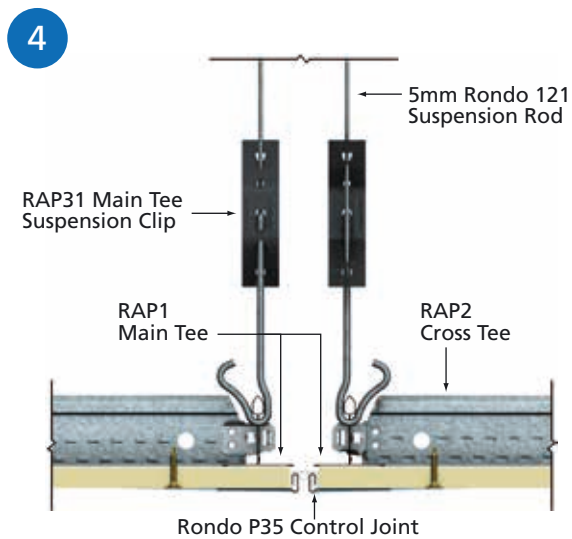
## Typical Application Details



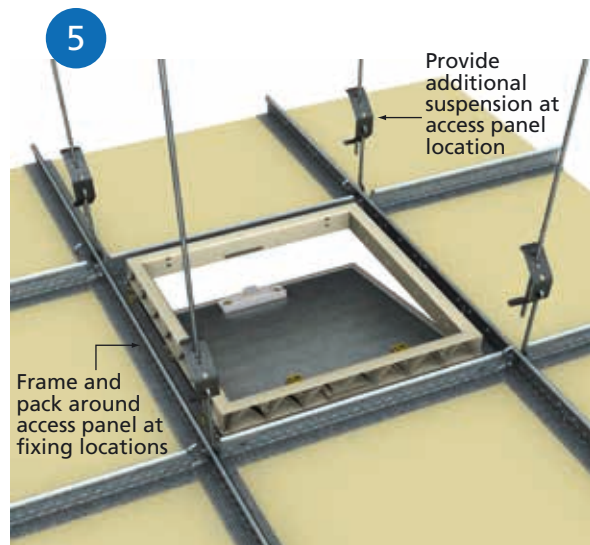
■ PERIMETER DETAIL



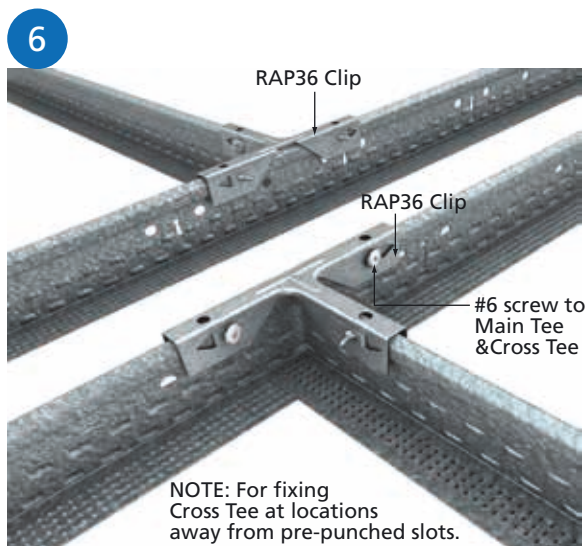
■ TYPICAL SUSPENSION DETAIL



■ USING RONDO P35 CONTROL JOINT



■ INSTALLING RONDO PANTHER® ACCESS PANEL



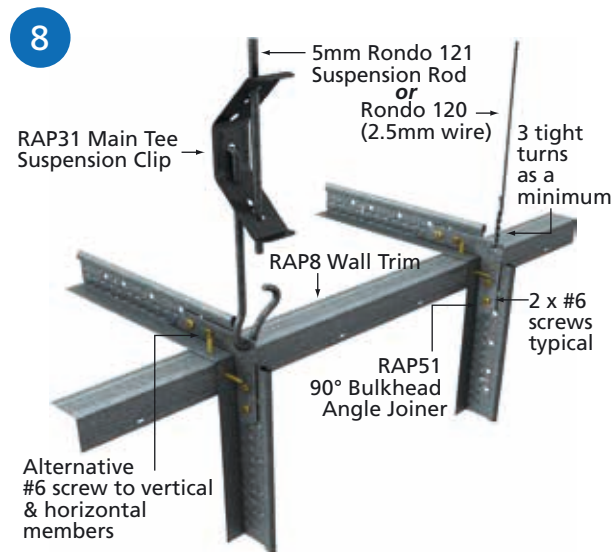
■ SECURING A SINGLE CROSS TEE



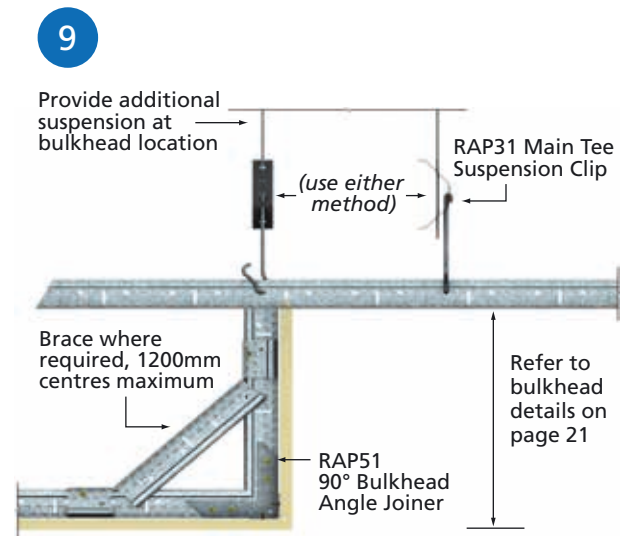
■ ALTERNATIVE SUSPENSION DETAIL

# FLAT CEILING SYSTEM (continued)

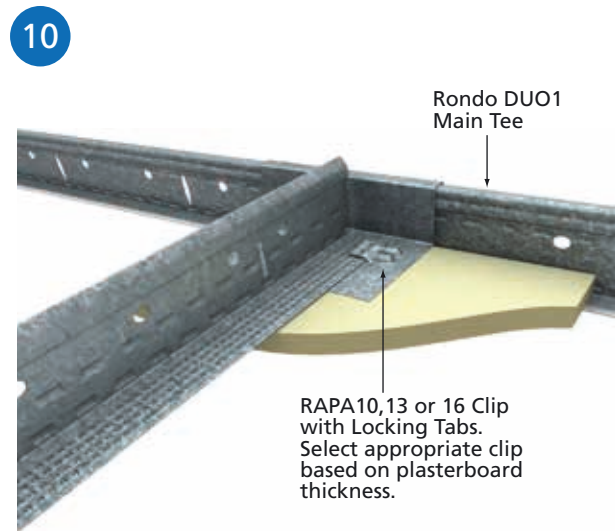
## Typical Application Details (continued)



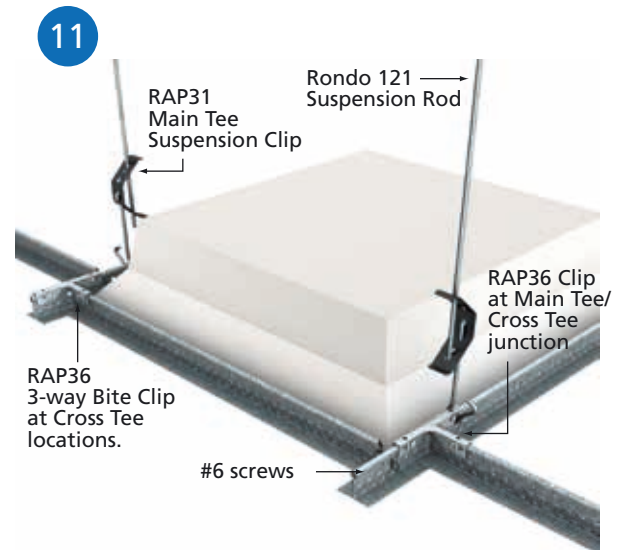
■ ANGLE CLIP DETAIL



■ BULKHEAD DETAILS



■ TRANSITION WITH RAPA CLIP



■ LIGHT FIXTURES

## Integrating Services

Services such as light fittings and air registers can be accommodated in the Rondo RAPID® Drywall Grid System, including applications where they are to be located parallel or perpendicular to the Main Tee.

Additional Cross Tees can be installed at 150mm centres, in the pre-punched slots on the Main Tee to allow for the fixtures to be framed and supported. In situations where the pre-punched slot is not available, the Rondo RAP36 Clip can be installed (see Figures 12 & 13).

### FOR LIGHT FITTINGS THAT ARE INSTALLED PERPENDICULAR TO THE MAIN TEE

RAP1 Main Tees are installed at 1250mm centres to accommodate the light fittings, and provide a clear opening of 1212mm for easy installation.

RAP2 Cross Tees 1250mm long are installed between the Main Tees at 600mm centres. Additional Cross Tees to support and frame out the fittings, can be installed as required using the RAP36 3-Way Bite Clip, where the Cross Tee is not aligned with the Main Tee pre-punched slots.

### FOR SHORTER RECTANGULAR FIXTURES

If the service unit length is less than 1162mm, Main Tees can be installed at 1200mm centres and 1200mm Cross Tees can be fitted as per normal.

**Note:** Square the ceiling grid prior to locking RAP36 Clip in place.

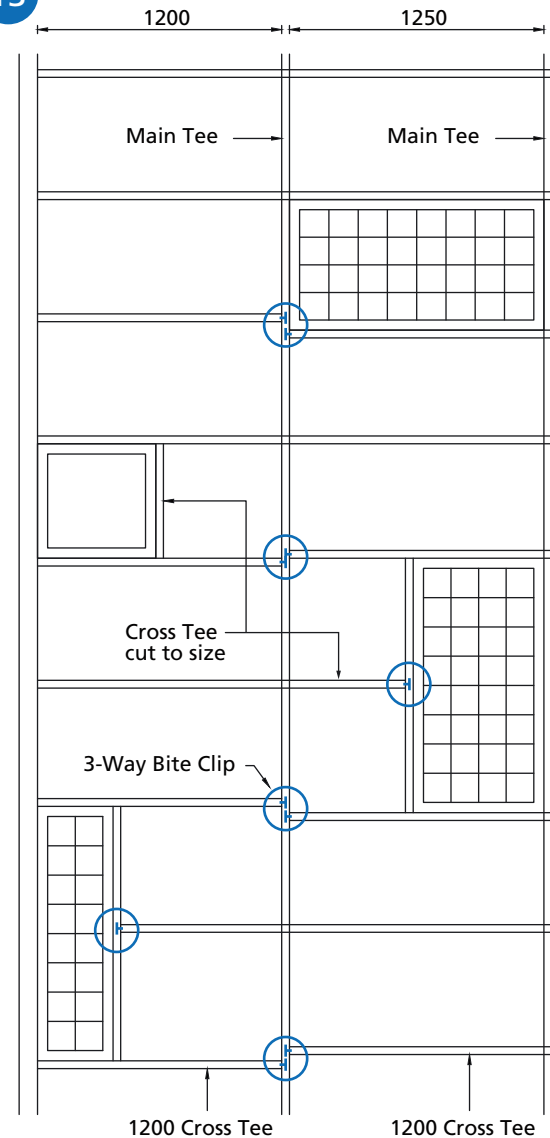
It is important the Cross Tees are secured in place by locking together, or by using a RAP36 3-way bite clip. Never leave a Cross Tee unconnected.

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■ RAP36 3-WAY BITE CLIP

13

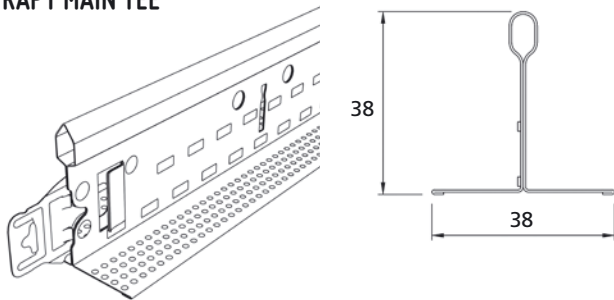


■ INSTALLATION USING RAP36

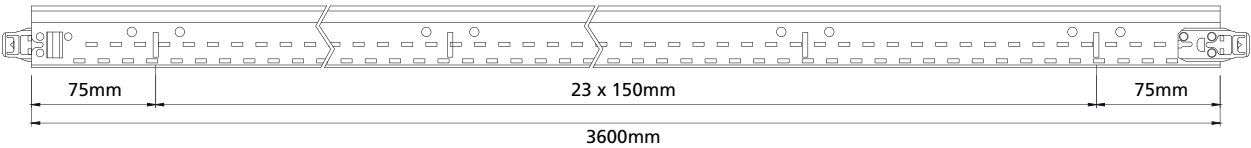
# FLAT CEILING SYSTEM (continued)

## Product Data Specifications

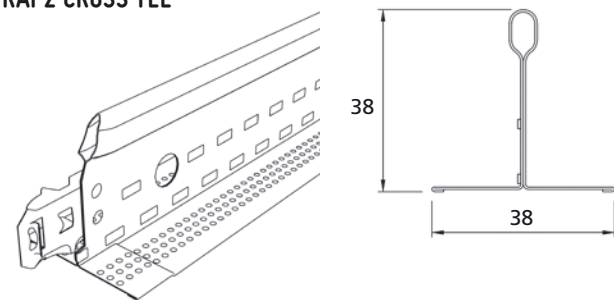
### RAP1 MAIN TEE



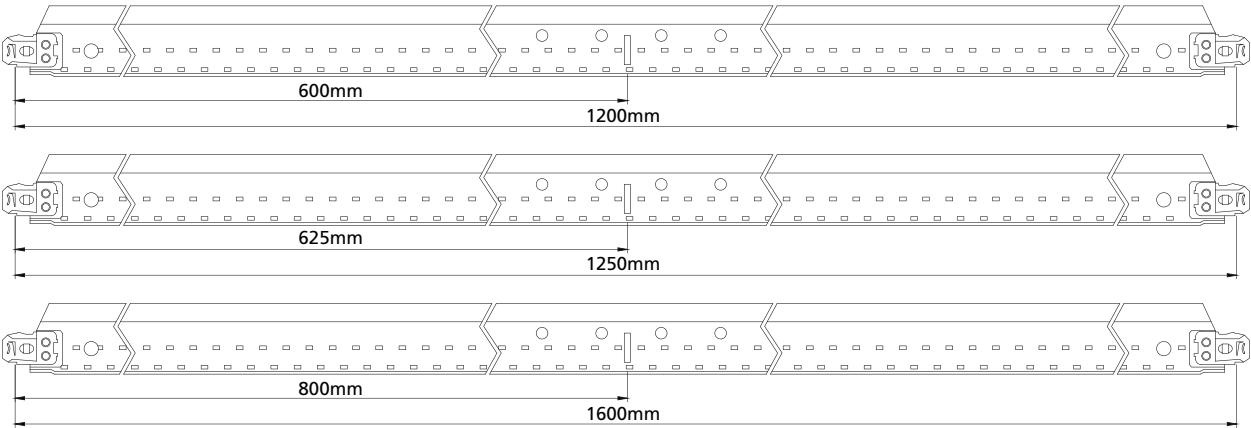
PART NO	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	SLOT SPACING (mm)
RAP1	3600	38	38	150cc



### RAP2 CROSS TEE

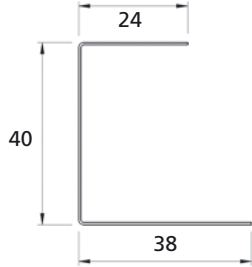
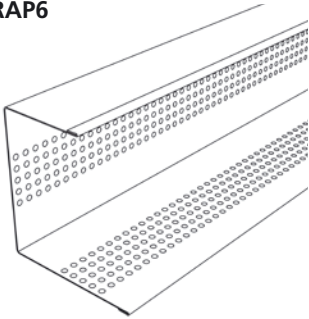


PART NO	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	SLOT SPACING (mm)
RAP2	1200	38	38	Centre
RAP2	1250	38	38	Centre
RAP2	1600	38	38	Centre



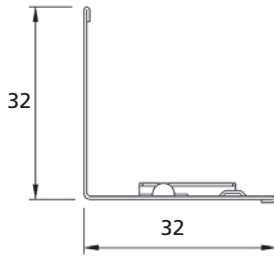
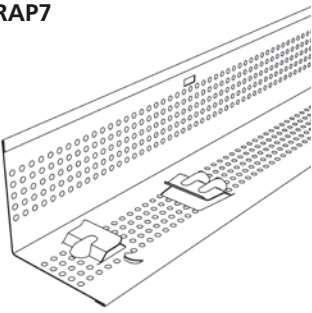
## WALL TRACK & WALL TRIMS

**RAP6**

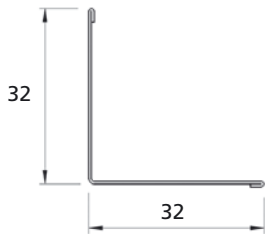
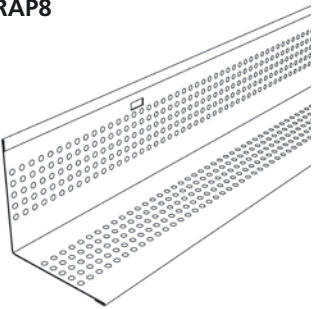


PART NO	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	SLOT SPACING (mm)
<b>RAP6</b>	3600	40	38	N/A
<b>RAP7</b>	3600	32	32	150cc
<b>RAP8</b>	3600	32	32	N/A

**RAP7**



**RAP8**



# FLAT CEILING SYSTEM (continued)

## Load Tables

### CEILING GRID COMPONENTS

**RAP1** 38mm x 38mm Main Tee

**RAP2** 38mm x 38mm Cross Tee *Lengths as nominated in table*

**TABLE 1: FLAT CEILING SYSTEM LOAD TABLES (kg/m<sup>2</sup>)**

MAIN TEE CENTRES (mm)	CROSS TEE LENGTH (mm)	MAIN TEE SPAN (mm)	CROSS TEE CENTRES (mm)	CEILING GRID CAPACITIES	
				kg/m <sup>2</sup>	EQUIVALENT LININGS
1200	1200	900	450	26.20	2 x 16mm Plasterboard
			600	26.60	2 x 16mm Plasterboard
		1200	450	8.60	1 x 13mm Plasterboard (Light)
			600	8.60	1 x 13mm Plasterboard (Light)
1250	1250	900	450	26.00	2 x 16mm Plasterboard
			600	21.00	2 x 13mm Plasterboard (Heavy)
		1200	450	8.60	1 x 13mm Plasterboard (Light)
			600	8.60	1 x 13mm Plasterboard (Light)
1600	1600	900	450	13.00	1 x 16mm Plasterboard
			600	8.60	1 x 13mm Plasterboard (Light)
		1200	450	–	Not permitted
			600	–	Not permitted

### PLASTERBOARD LINING WEIGHTS (kg/m<sup>2</sup>)

TYPE	WEIGHT (kg/m <sup>2</sup> )
10mm Plasterboard	6.80
13mm Plasterboard (Light)	8.60
13mm Plasterboard (Heavy)	10.50
16mm Plasterboard	13.00
10mm Ceiling Board	7.20

#### NOTES TO TABLE:

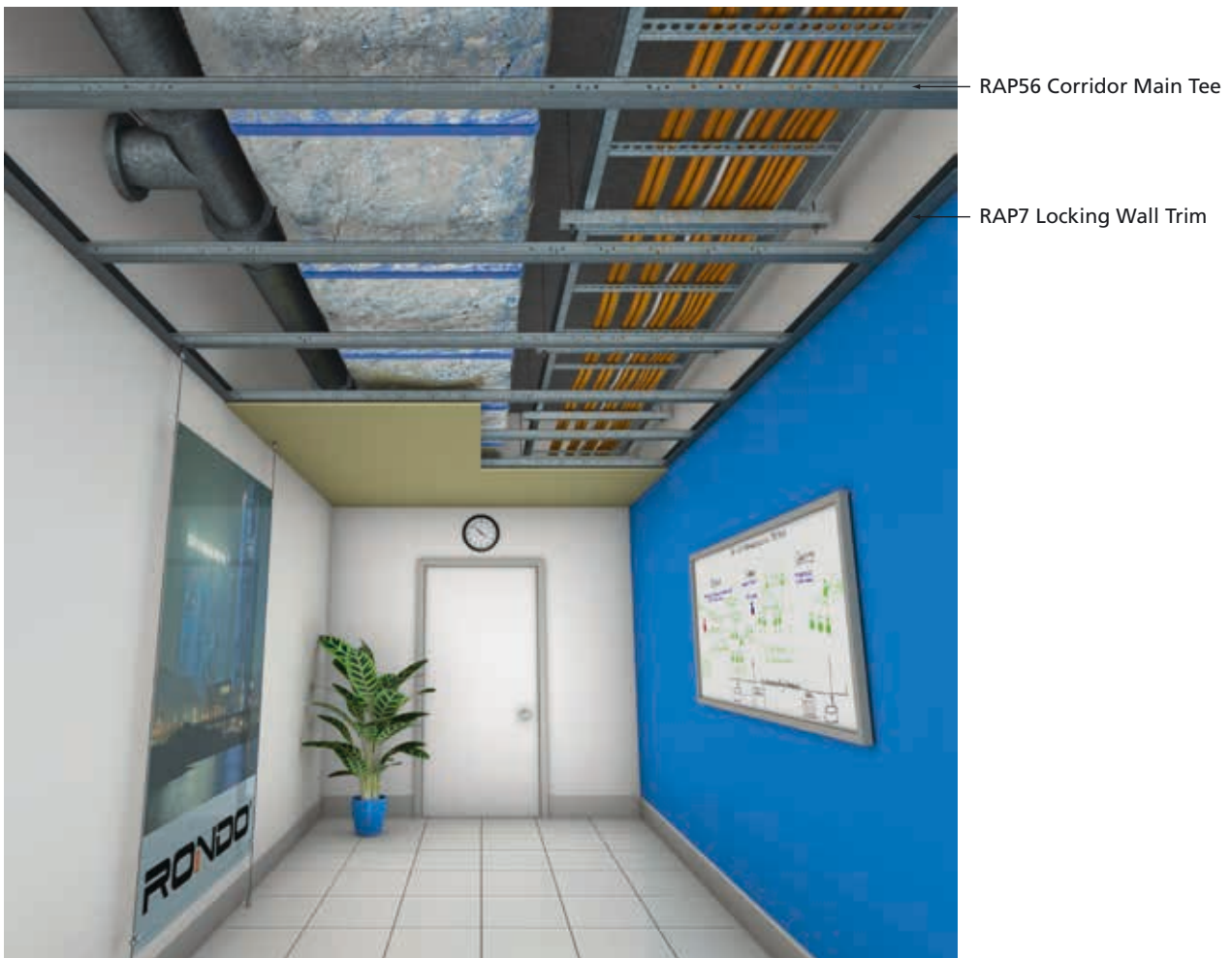
1. The above table provides the allowable ceiling weights (kg/m<sup>2</sup>), or equivalent plasterboard linings, which can be applied to the nominated grids. Factoring of the loads is not required for compliance to AS/NZS2785.
2. Connections to the primary structure to be independently checked, for a design load of 0.50kN in tension.
3. Light fittings or other services may require additional or independent suspension.
4. The Rondo Rapid ceiling grid is not fire rated, and the plasterboard is nominated only in terms of load capacity.
5. Board weights vary between manufacturers. Rondo recommends checking the specific board configuration with the manufacturer prior to installation.

# RAPID CORRIDORS

## Typical Application Details

The Rondo RAPID® Drywall System can span up to 1600mm without the use of suspension hangers, which makes it an ideal solution for corridors where quite often, services such as air conditioning ducts, electrical and data cabling, and fire sprinkler pipework make it nearly impossible to install a suspended ceiling.

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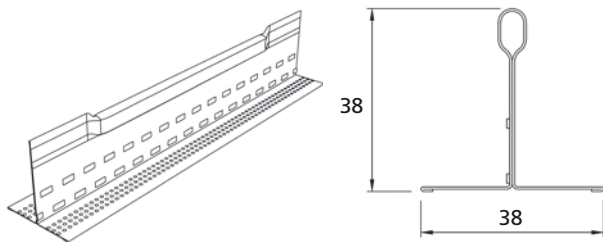


■ TYPICAL RAPID® CORRIDOR SYSTEM

# RAPID CORRIDORS (continued)

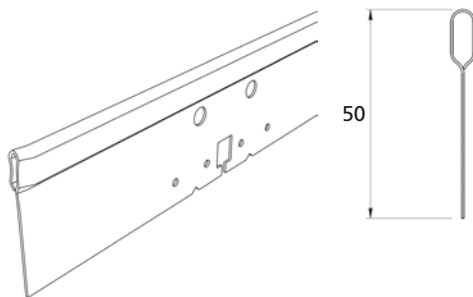
## Product Data Specifications

### RAP56 CORRIDOR MAIN TEE



PART NO	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	SLOT SPACING (mm)
RAP56	3600	38	38	N/A
RAP47	3600	50	-	150cc

### RAP47 BULKHEAD/CORRIDOR MAIN TEE STRONGBACK SUPPORT



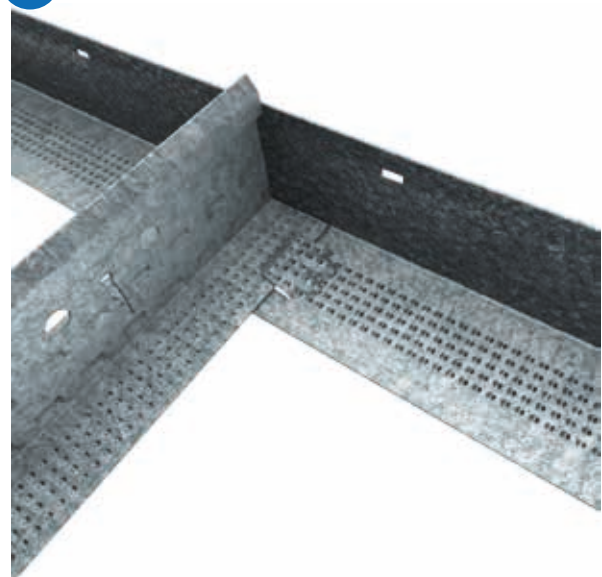
### LOCKING WALL TRIM

The RAP7 Locking Wall Trim offers a quick and easy solution for securing the ceiling grid at the abutting perimeter walls.

#### RAP7 Locking Wall Trim features:

- Pre-engineered locking tabs punched at 150mm centres which prevents lateral and upward movement of cross tees and eliminates the need for screws, pop rivets, or crimpers
- Knurled surface on both flanges helps locate screws
- Reverse hem to prevent screw spinoff and offers safer handling
- Alignment crimp at locking tabs for fast, easy alignment

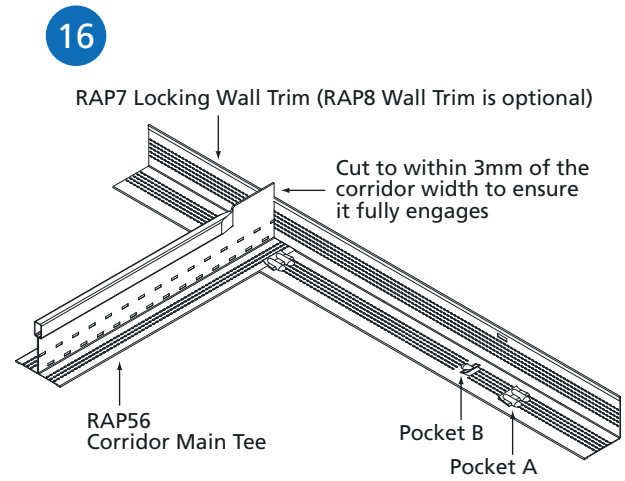
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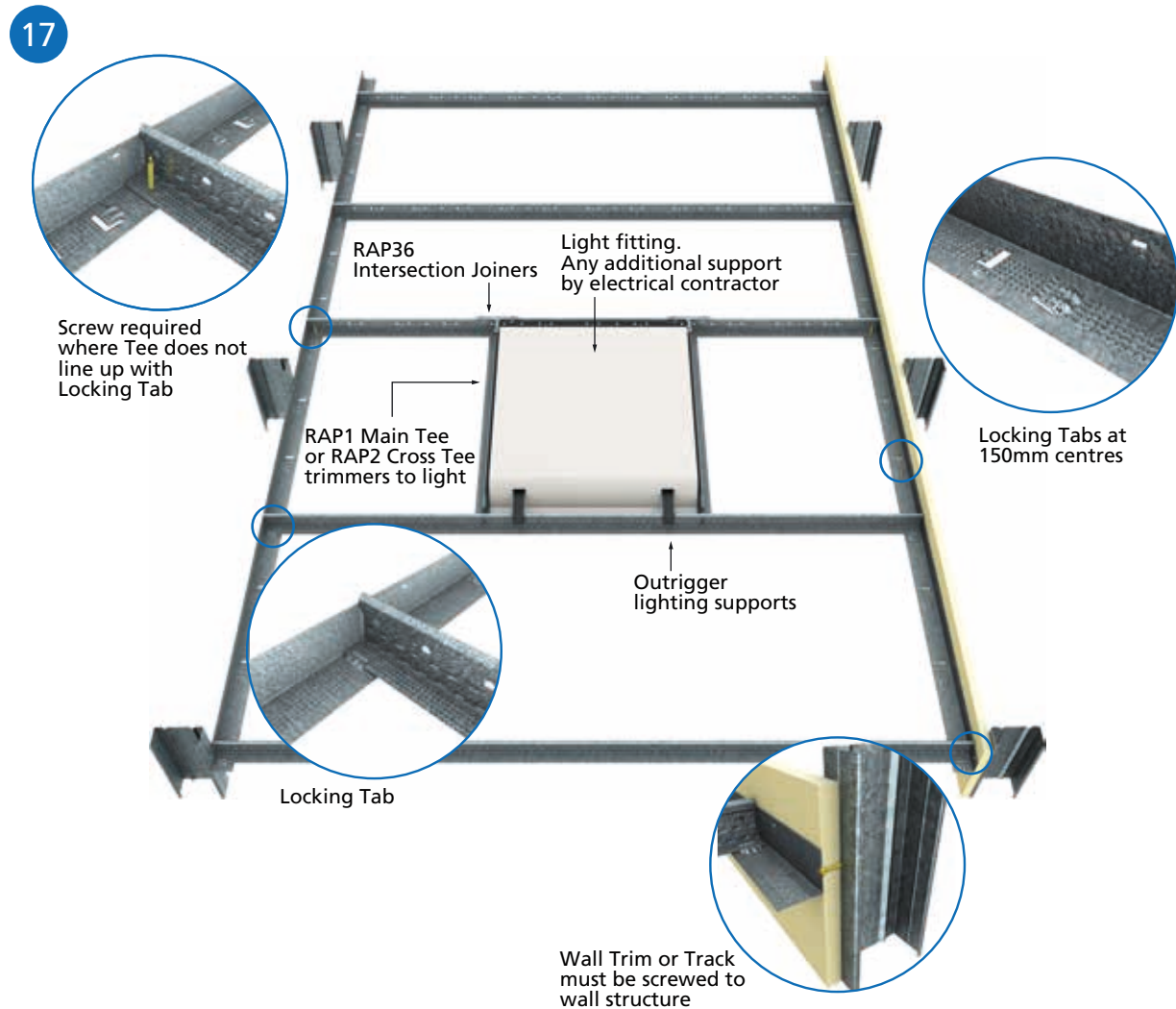
RAP56 INSTALLED INTO RAP7

## Installation Details

1. RAP56 Corridor Main Tees must be cut to within 3mm of the corridor width to ensure it fully engages with the RAP7 Locking Wall Trim.
2. Fix the RAP7 Locking Wall Trim and/or RAP8 Wall Trim to wall structure at not more than 600mm centres.
3. Insert right hand flange of tee into pocket "A" first and allow left flange to clear pocket "B" and rest on angle moulding. Slide tee to the left to engage in pocket "B" (audible click)
4. Check that RAP56 Corridor Main Tee is installed correctly and sitting flat on the wall trim.



■ INSTALLATION OF RAP56 CORRIDOR MAIN TEE



■ LIGHT FIXTURE APPLICATION DETAILS

# RAPID CORRIDORS (continued)

## Load Tables

### CEILING GRID COMPONENTS

**RAP56** Corridor Main Tee - 3.6m long

**RAP47** Bulkhead/Corridor Main Tee Strongback

**TABLE 2: SHORT SPAN CEILING LOAD TABLES (kg/m<sup>2</sup>)**

MAIN TEE SPAN (mm)	MAIN TEE SPACING (mm)	CEILING GRID CAPACITIES	
		kg/m <sup>2</sup>	EQUIVALENT LININGS
<b>1200</b>	450	26.00	2 x 16mm Plasterboard
	600	21.00	2 x 13mm Plasterboard (Heavy)
<b>1500</b>	450	21.00	2 x 13mm Plasterboard (Heavy)
	600	8.60	1 x 13mm Plasterboard (Light)
<b>1600</b>	450	13.60	2 x 10mm Plasterboard
	600	8.60	1 x 13mm Plasterboard (Light)
<b>USING RAP47 BULKHEAD/CORRIDOR MAIN TEE STRONGBACK SPAN SUSPENSION</b>			
<b>1800*</b>	450	39.00	3 x 16mm Plasterboard
	600	21.00	2 x 13mm Plasterboard (Heavy)
<b>2100*</b>	450	26.00	2 x 16mm Plasterboard
	600	21.00	2 x 13mm Plasterboard (Heavy)

\* indicates corridor total width rather than Main Tee span.

### PLASTERBOARD LINING WEIGHTS (kg/m<sup>2</sup>)

TYPE	WEIGHT (kg/m <sup>2</sup> )
10mm Plasterboard	6.80
13mm Plasterboard (Light)	8.60
13mm Plasterboard (Heavy)	10.50
16mm Plasterboard	13.00
10mm Ceiling Board	7.20

#### NOTES TO TABLE:

1. The above table provides the allowable ceiling weights (kg/m<sup>2</sup>), or equivalent plasterboard linings, which can be applied to the nominated grids. Factoring of the loads is not required for compliance to AS/NZS2785.
2. Connections to the primary structure to be independently checked.
3. Light fittings or other services may require additional or independent suspension.
4. Suspension to RAP47 Bulkhead/Corridor Main Tee Strongback at 1200mm centres maximum.
5. The Rondo Rapid ceiling grid is not fire rated, and the plasterboard is nominated only in terms of load capacity.
6. Board weights vary between manufacturers. Rondo recommends checking the specific board configuration with the manufacturer prior to installation.

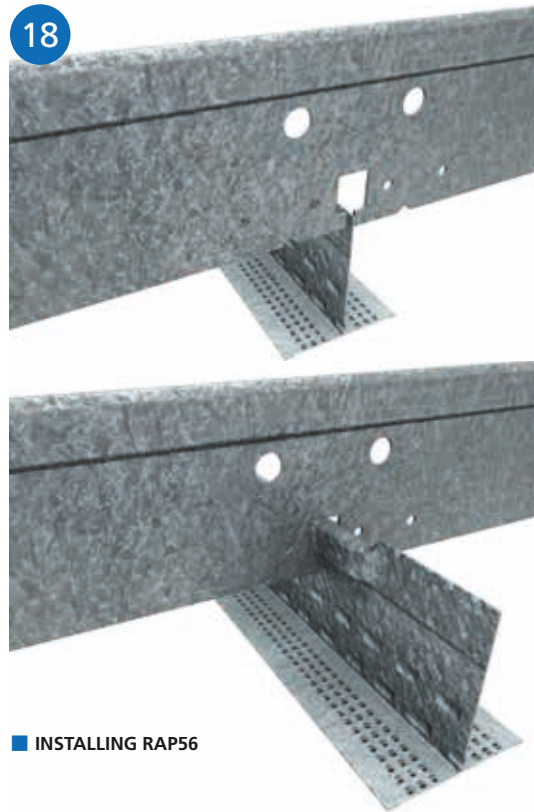
## Bulkhead/Corridor Main Tee Strongback

Where the ceiling span exceeds 1600mm, the RAP47 Bulkhead/Corridor Main Tee Strongback can be used as support with suspension points at 1200mm centres.

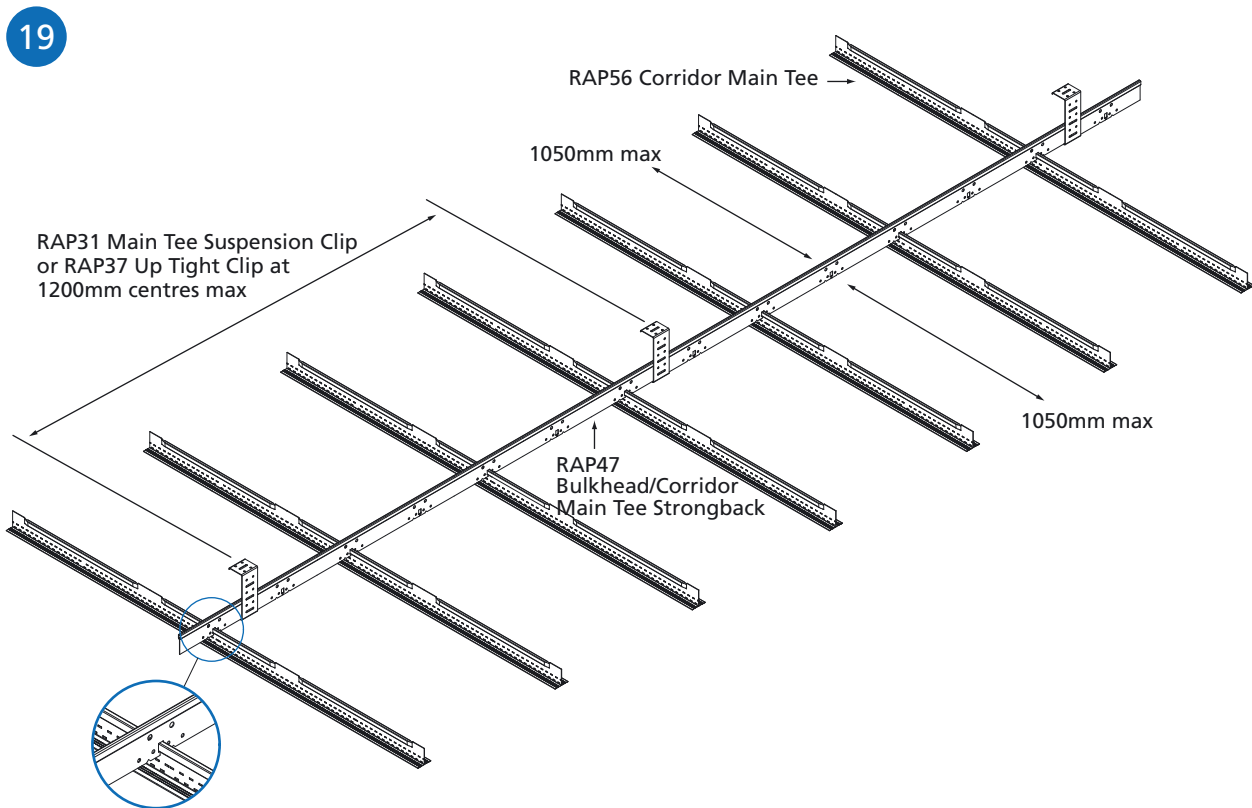
### TO INSTALL:

1. Install RAP56 Bulkhead/Corridor Main Tees throughout on module, ensuring corridor overall width is less than 2100mm.
2. Place the RAP47 Corridor Main Tee Strongback over the flattened head portion of the Main Tees\*.
3. Slide the RAP47 along the Main Tees until it is centrally located within the boxed head section of the Main Tee.
4. Provide suspension along the RAP47 at not more than 1200mm centres, as required.

\***Note:** Head of RAP47 can be flattened using pliers or similar for installation of Strongback.



■ INSTALLING RAP56

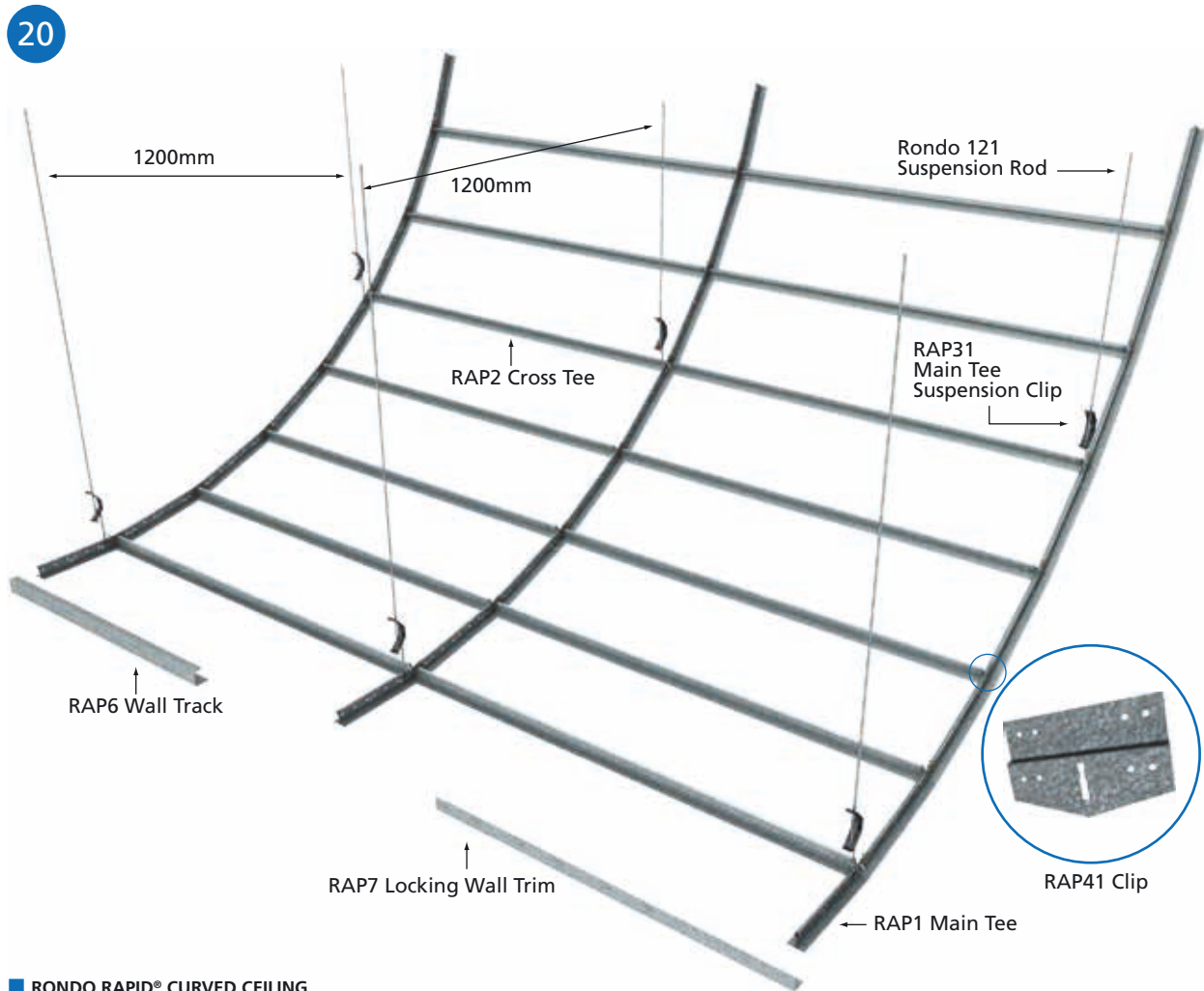


■ TYPICAL APPLICATION DETAILS OF RAP56 BULKHEAD/CORRIDOR MAIN TEE STRONGBACK

# CURVED CEILINGS

## Typical Application Details

Products in the standard Rondo RAPID® Drywall Grid range can not only produce flat ceilings, but can also be used to achieve curved ceilings, including both single or multiple curves, in a convex or concave form.



■ RONDO RAPID® CURVED CEILING

## Installation Details

### CONCAVE & CONVEX CEILINGS

1. Cut RAP1 Main Tee at pre-punched slot locations, as necessary (*Figure 21*)
2. Bend the face of the RAP1 Main Tee to match the desired radius. *Refer to table on Page 15.*
3. Screw fix RAP41 Clip to reinforce Main Tee at each 'cut out' location, using four #6 x 12mm button head screws.

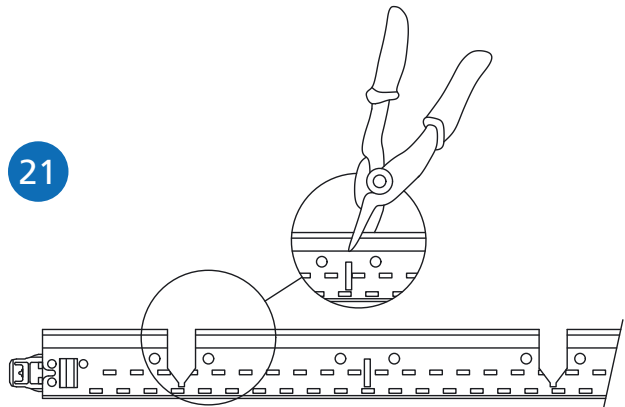
### HOW TO SETOUT AN ARC USING THE OFFSET METHOD

1. Establish a vertical centre line
2. Scribe a line at 90° to the centreline
3. Mark 600mm increments on the line perpendicular to the centre line
4. At the 600mm marks, offset points of arc above (convex) or below (concave) the perpendicular line (maintain consistent spacing of point) as appropriate. *Refer to table on page 20.*
5. Connect points to form a smooth arc

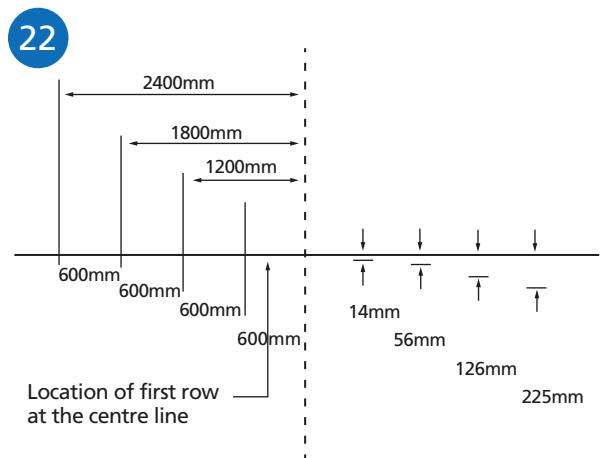
### COMPLETE THE TEMPLATE

Once a smooth arc is marked:

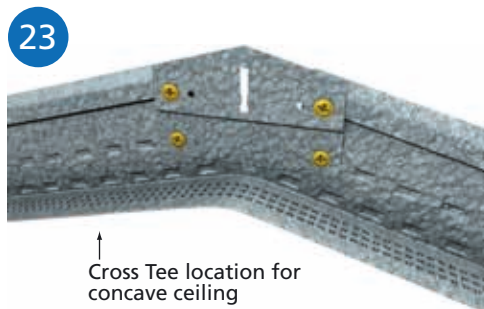
1. Cut along the radius and remove the section of template, either convex or concave, as appropriate.
2. Cut the Main Tees as required and position along the cut radius of the template (see *Figure 25*)
3. Screw RAP41 Clips to the faceted Main Tee at all cut out locations, using four #6x12mm screws.  
*Note the clip orientation as required for either convex or concave curved ceilings. (Refer Figures 23 & 24).*
4. On the template, mark a slot location reference point to maintain consistent slot location



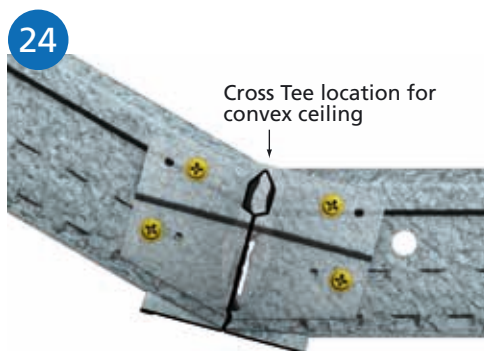
■ USING TIN SNIPS TO CUT RAP1 MAIN TEE



■ ARC SETOUT – OFFSET METHOD (example of 12.9m Radius setout)



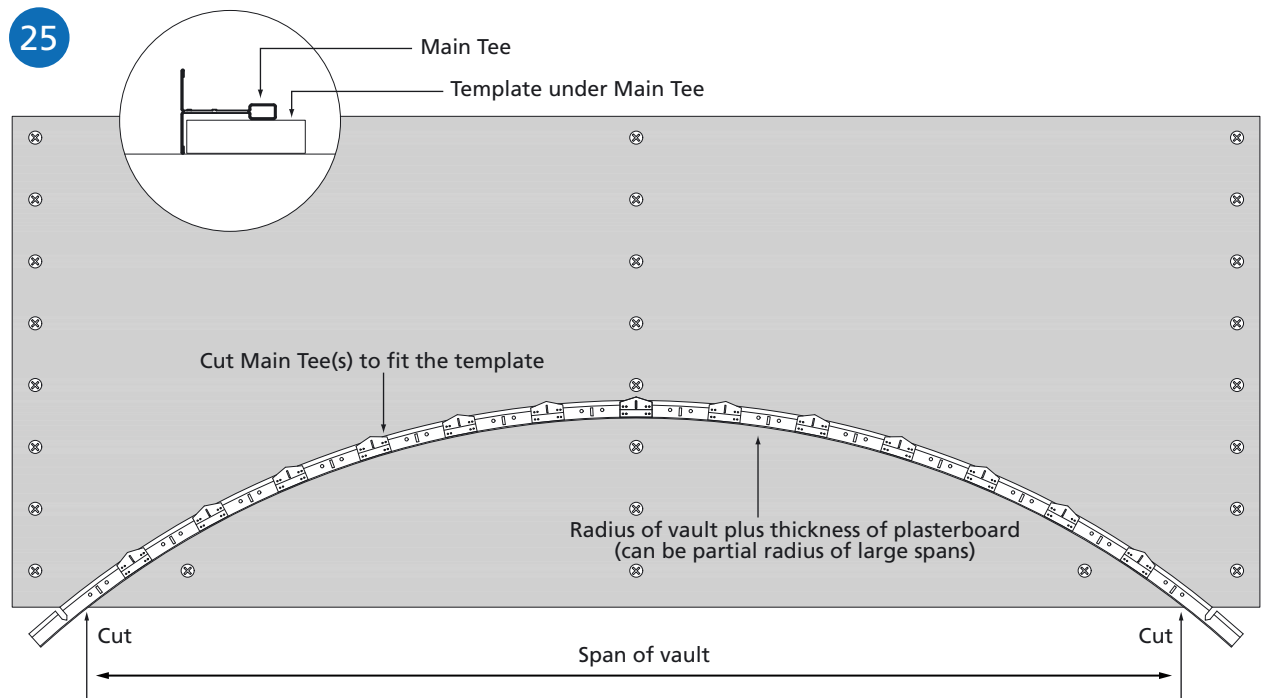
■ RAP41 CLIP PLACEMENT (CONCAVE)



■ RAP41 CLIP PLACEMENT (CONVEX)

# CURVED CEILINGS (continued)

## Installation Details (continued)



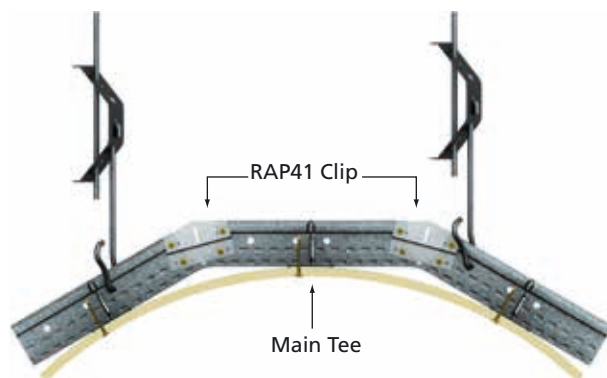
■ TYPICAL COMPLETED TEMPLATE FOR CONCAVE CEILING

### Notes for all curved ceilings:

- Suspension hangers spaced along the Main Tees at not more than 1200mm centres (dependent upon plasterboard construction).
- Add vertical braces as required to stabilize the ceiling grid.
- Curvature of the sheeting material is determined by its plasticity (refer to board manufacturer's recommendations for maximum support centres, i.e. Cross Tee maximum spacing).
- Place the RAP41 Clip on the side of the web where the rotary stitching forms a cavity. This allows the clip to be flush with the web.

**26**

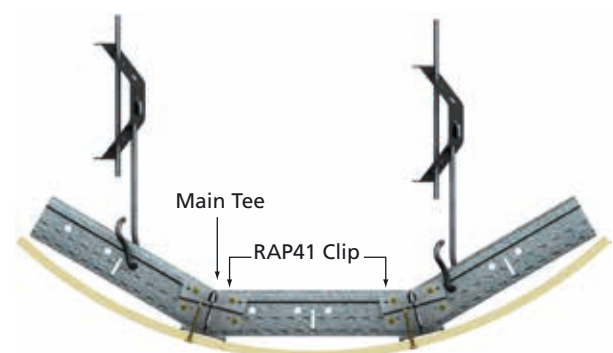
**Concave Ceilings**  
When installing a concave ceiling,  
Cross Tee should be placed between the RAP41 Clips  
**Note:** RAP41 Clips positioned  
"point up" for Concave Ceiling



■ CONCAVE CEILING

**27**

**Convex Ceilings**  
When installing a convex ceiling,  
Cross Tee should be placed at the RAP41 Clips  
**Note:** RAP41 Clips positioned  
"point down" for Convex Ceiling



■ CONVEX CEILING

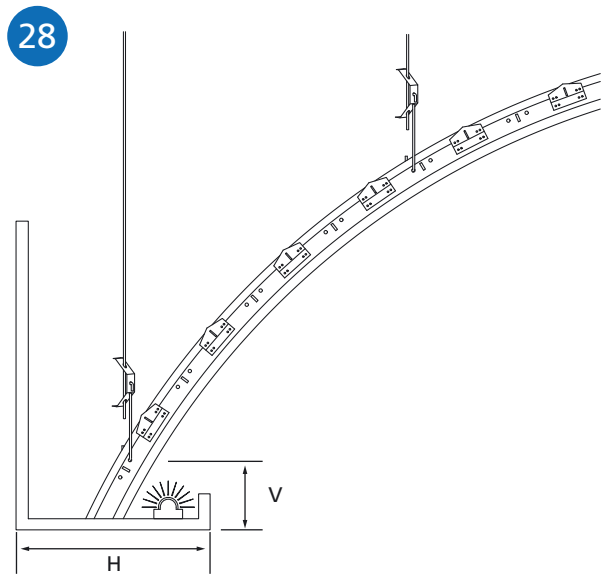
## Special Curved Solutions

### CANTILEVER CEILINGS

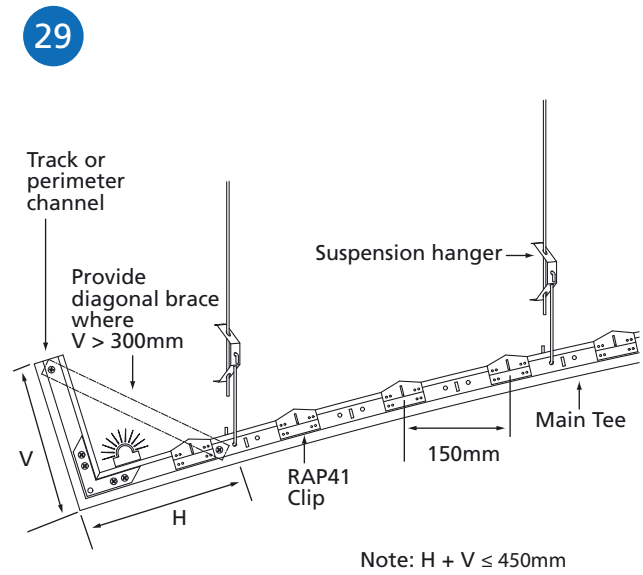
A maximum cantilever dimension of 450 mm is allowed on the following basis:

1. Being the sum of both the horizontal and vertical elements.
2. Is measured as the distance from a hanger to the terminal end of the cantilever.

**Note:** Regardless of the horizontal dimension, a diagonal brace must be installed if the vertical dimension exceeds 300mm.



■ VAULT PERIMETER LIGHT COVE



■ FLOATING VAULT

# CURVED CEILINGS (continued)

## Radius Offset Dimensions

		RADIUS DIMENSION (mm)															
		3000	3300	3600	3900	4200	4500	4800	5100	5400	5700	6000	6300	6600	6900	7200	
600mm INCREMENTS FROM CENTRE LINE	600	60	55	50	46	43	40	38	35	33	32	30	29	27	26	25	
	1200	250	226	206	189	175	163	152	143	135	128	121	115	110	105	101	
	1800	600	534	482	440	405	376	350	328	309	292	276	263	250	239	229	
	2400	1200	1035	917	826	753	693	643	600	563	530	501	475	452	431	412	
			7500	7800	8100	8400	8700	9000	9300	9600	9900	10200	10500	10800	11100	11400	11700
	600	24	23	22	21	21	20	19	19	18	18	17	17	16	16	15	
	1200	97	93	89	86	83	80	78	75	73	71	69	67	65	63	62	
	1800	219	211	203	195	188	182	176	170	165	160	155	151	147	143	139	
	2400	394	378	364	350	338	326	315	305	295	286	278	270	263	255	249	
			12000	12300	12600	12900	13200	13500	13800	14100	14400	14700	15000	15300	15600	15900	16200
	600	15	15	14	14	14	13	13	13	13	12	12	12	12	11	11	
	1200	60	59	57	56	55	53	52	51	50	49	48	47	46	45	45	
	1800	136	132	129	126	123	121	118	115	113	111	108	106	104	102	100	
	2400	242	236	231	225	220	215	210	206	201	197	193	189	186	182	179	
			16500	16800	17100	17400	17700	18000	18300	18600	18900	19200	19500	19800	20100	20400	20700
	600	11	11	11	10	10	10	10	10	10	9	9	9	9	9	9	
1200	44	43	42	41	41	40	39	39	38	38	37	36	36	35	35		
1800	98	97	95	93	92	90	89	87	86	85	83	82	81	80	78		
2400	175	172	169	166	163	161	158	155	153	151	148	146	144	142	140		
		21000	21300	21600	21900	22200	22500	22800	23100	23400	23700	24000	24300	24600	24900	25200	
600	9	8	8	8	8	8	8	8	8	8	8	7	7	7	7		
1200	34	34	33	33	32	32	32	31	31	30	30	30	29	29	29		
1800	77	76	75	74	73	72	71	70	69	68	68	67	66	65	64		
2400	138	136	134	132	130	128	127	125	123	122	120	119	117	116	115		
		25500	25800	26100	26400	26700	27000	27300	27600	27900	28200	28500	28800	29100	29400	29700	
600	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6		
1200	28	28	28	27	27	27	26	26	26	26	25	25	25	25	24		
1800	64	63	62	61	61	60	59	59	58	58	57	56	56	55	55		
2400	113	112	111	109	108	107	106	105	103	102	101	100	99	98	97		
		30000	30300	30600	30900	31200	31500	31800	32100	32400	32700	33000	33300	33600	33900	34200	
600	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5		
1200	24	24	24	23	23	23	23	22	22	22	22	22	21	21	21		
1800	54	54	53	52	52	51	51	51	50	50	49	49	48	48	47		
2400	96	95	94	93	92	92	91	90	89	88	87	87	86	85	84		
		34500	34800	35100	35400	35700											
600	5	5	5	5	5												
1200	21	21	21	20	20												
1800	47	47	46	46	45												
2400	84	83	82	81	81												

# RAPID BULKHEADS

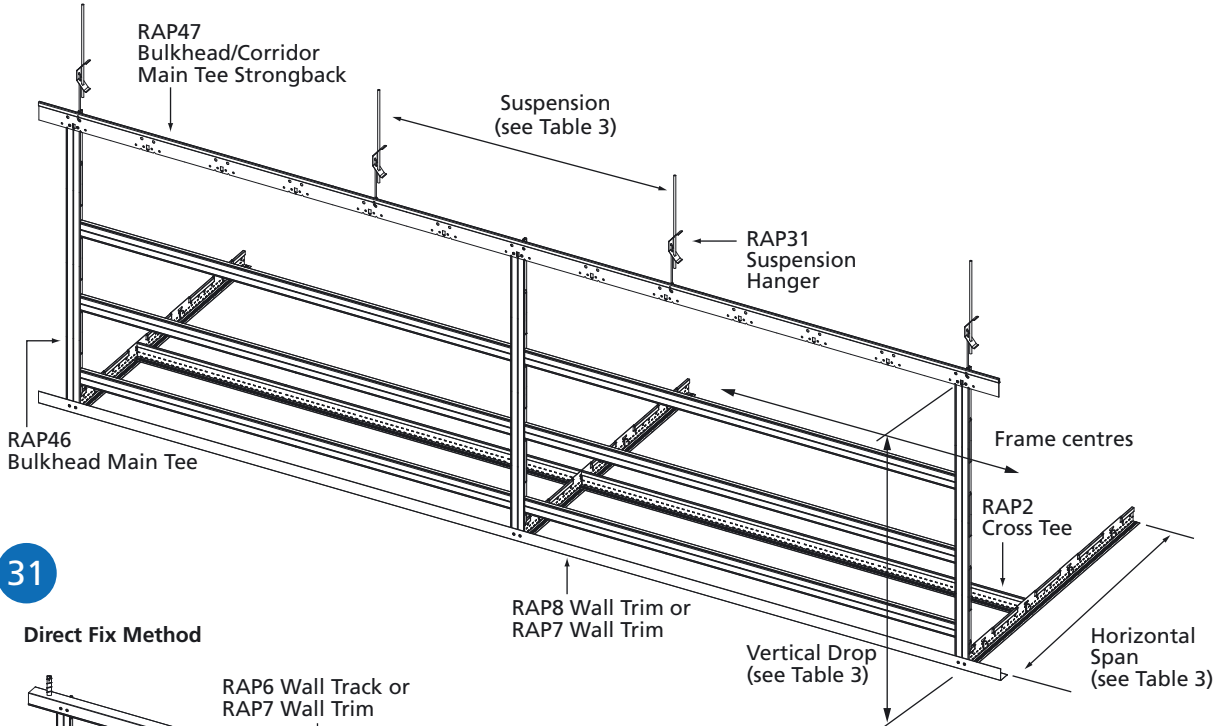
## Typical Application Details

The Rondo RAPID® Drywall System can also be used for framing bulkheads in ceilings.

Our RAPID® Bulkhead System uses standard RAP2 Cross Tees and Wall Trims, along with RAP46 Bulkhead Main Tee or RAP47 Bulkhead/Corridor Main Tee Strongback, and complementary angles.

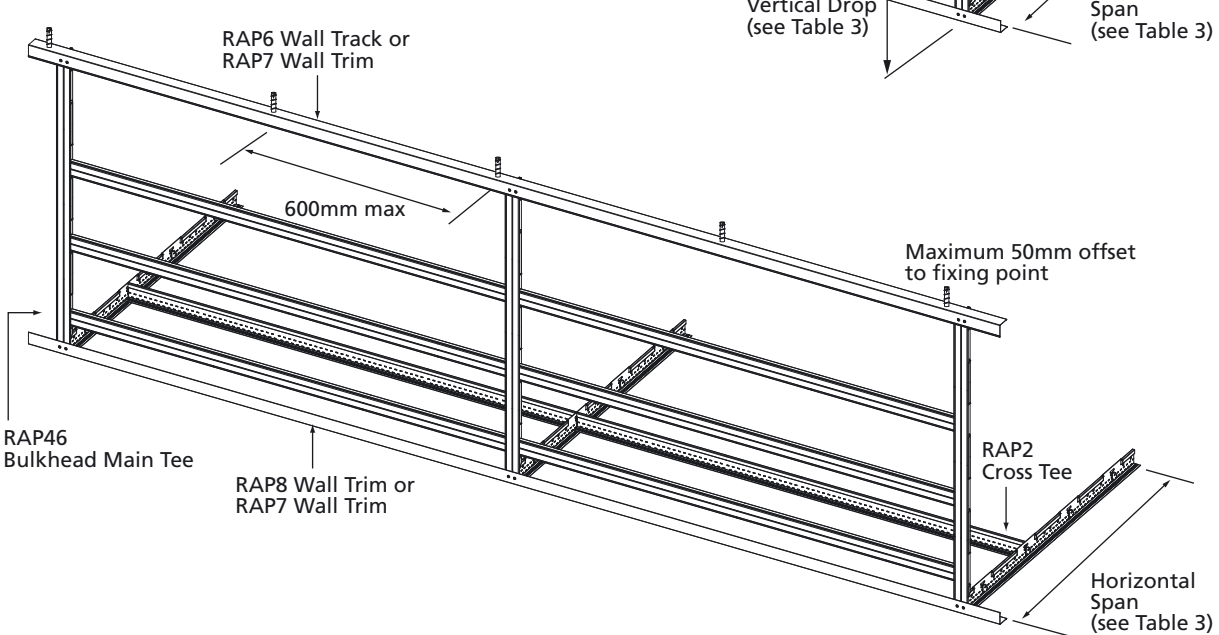
30

Suspended from Deck



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Direct Fix Method

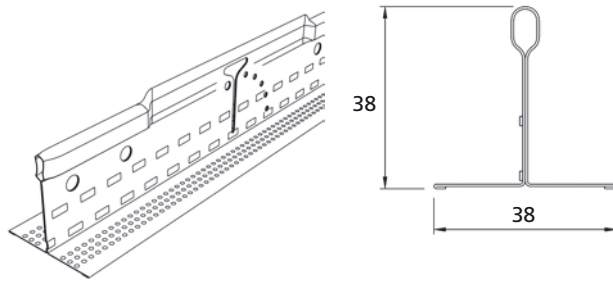


■ TYPICAL DIRECT FIX AND SUSPENDED BULKHEAD APPLICATIONS

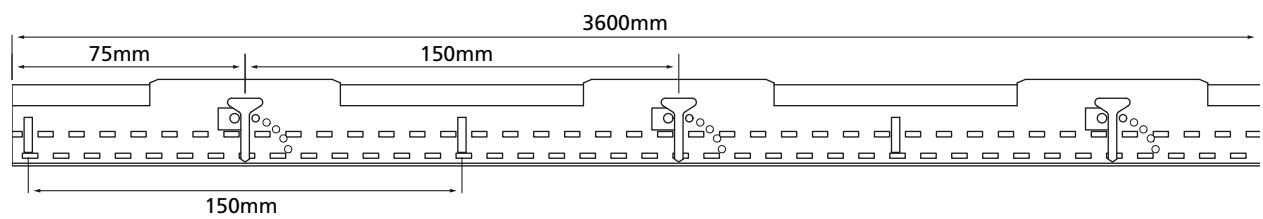
# RAPID BULKHEADS (continued)

## Product Data Specifications

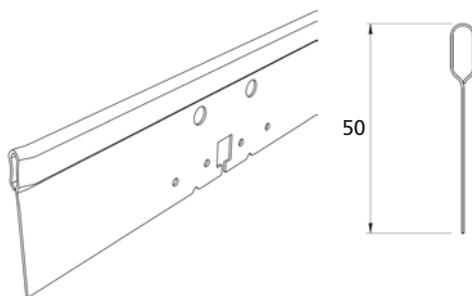
### RAP46 BULKHEAD MAIN TEE



PART NO	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	SLOT SPACING (mm)
RAP56	3600	38	38	150cc



### RAP47 BULKHEAD/CORRIDOR MAIN TEE STRONGBACK

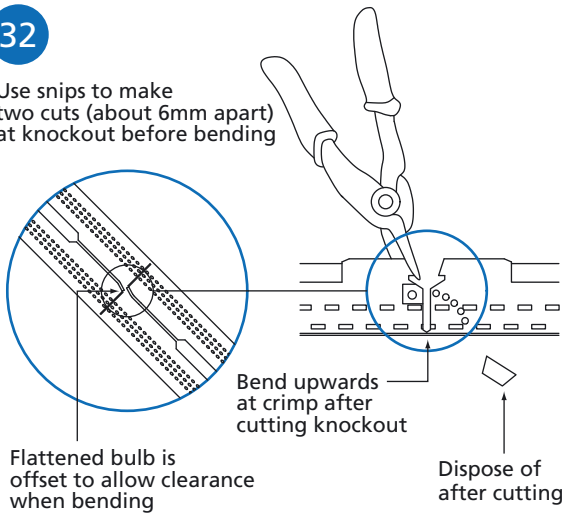


PART NO	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	SLOT SPACING (mm)
RAP47	3600	50	-	150cc

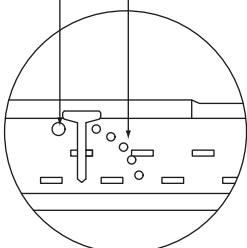
# Installation Details

32

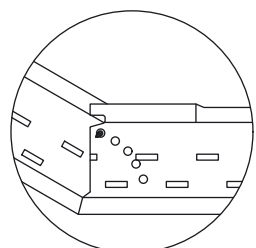
Use snips to make two cuts (about 6mm apart) at knockout before bending



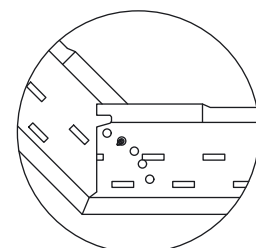
Clearance hole  
Line up angle holes with clearance hole



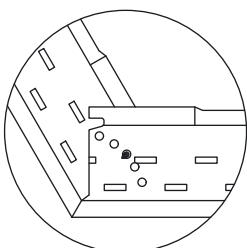
0° Angle



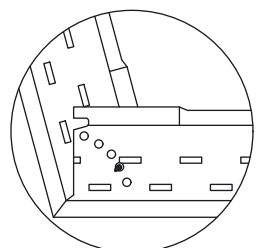
30° Angle



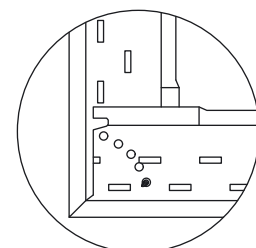
45° Angle



60° Angle

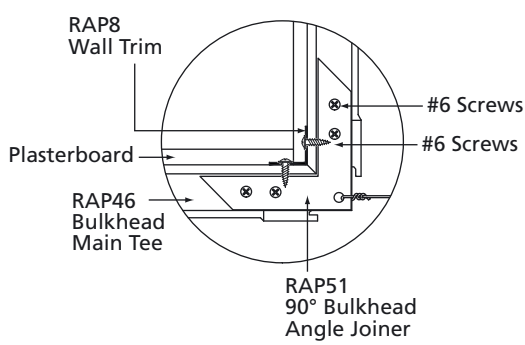


75° Angle



90° Angle

**Note:** Use #6 Framing Screw, screw through clearance hole and then through angle hole



**CUTTING RAP46 BULKHEAD MAIN TEE AND SCREW LOCATIONS**

# RAPID BULKHEADS (continued)

## Load Tables

### CEILING GRID COMPONENTS

**RAP46** Bulkhead Main Tee - 3.6m long

**RAP47** Bulkhead/Corridor Main Tee Strongback

**TABLE 3: BULKHEAD LOAD TABLES (kg/m<sup>2</sup>)**

FRAME CENTRES (mm)	HORIZONTAL SPAN (mm)			
	400	600	800	900
BULKHEAD CAPACITY (kg/m <sup>2</sup> ) / EQUIVALENT LININGS				
600	32.8	21.1	12.6	–
	1 x 16mm Plasterboard	1 x 16mm Plasterboard	1 x 13mm Plasterboard (Heavy)	Not Permitted

**NOTES TO TABLE:**

- Horizontal spans greater than 900mm require a mid span suspension, or a RAP47 Bulkhead/Corridor Main Tee Strongback mid span and suspended at 1200mm maximum centres.
- At no time should the horizontal dimension exceed 1800mm.

SUSPENDED BULKHEADS		DIRECT FIXED BULKHEADS	
Suspension Points	Vertical Drop (mm)	Suspension Points	Vertical Drop (mm)
600mm Centres	1600	600mm Centres	1600
1200mm Centres	1050	–	–

### PLASTERBOARD LINING WEIGHTS (kg/m<sup>2</sup>)

TYPE	WEIGHT (kg/m <sup>2</sup> )
10mm Plasterboard	6.80
13mm Plasterboard (Light)	8.60
13mm Plasterboard (Heavy)	10.50
16mm Plasterboard	13.00
10mm Ceiling Board	7.20

**NOTES TO TABLE:**

- The above table provides the allowable ceiling weights (kg/m<sup>2</sup>), or equivalent plasterboard linings, which can be applied to the nominated grids. Factoring of the loads is not required for compliance to AS/NZS2785.
- Connections to the primary structure to be independently checked.
- Light fittings or other services may require additional or independent suspension.
- Suspension to RAP47 Bulkhead/Corridor Main Tee Strongback at nominated centres.
- The Rondo Rapid bulkhead framing is not fire rated, and the plasterboard is nominated only in terms of load capacity.
- Board weights vary between manufacturers. Rondo recommends checking the specific board configuration with the manufacturer prior to installation.

# RAPID WALL FRAMING

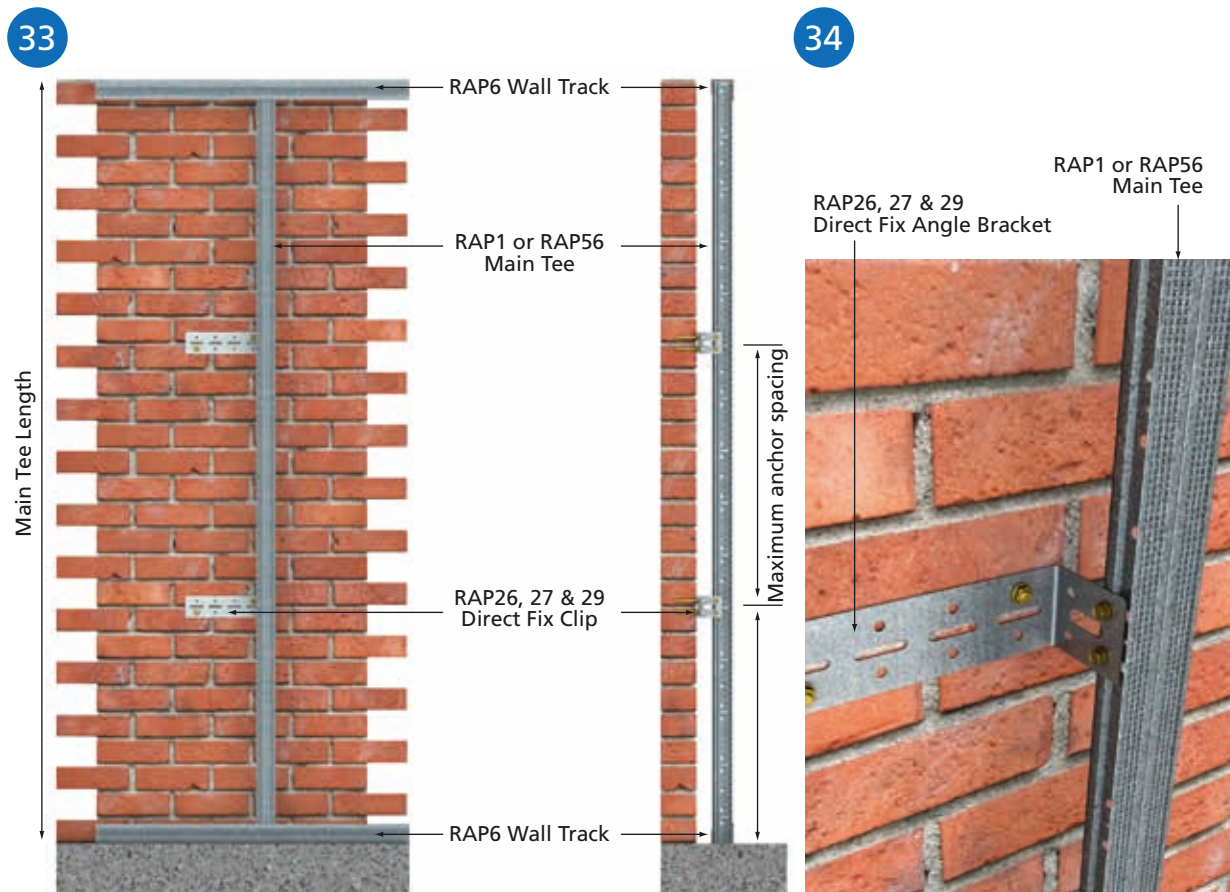
## Typical Application

A simple wall frame can also be achieved using the RAP1 Main Tee or RAP56 Corridor Main Tee along with RAP6 Wall Track and direct fixing brackets.

1. Locate and fix the RAP6 Wall Track at the top and bottom of the wall, with suitable anchors at not more than 600mm centres.
2. Cut Main Tees to length and install at required centres (to suit your building board); and screw fix to Wall Track. This method will help in levelling the wall system. Ensure head track is clear of slab soffit by not less than 20mm.
3. Secure Direct Fix Angle Brackets to both the structure (as per table), and to the Main Tee.

### WALL SYSTEM CLIP SPACINGS

MAIN TEE LENGTH (mm)	MAXIMUM ANCHOR SPACING
2400	1200mm centres
2700	900mm centres
3000	1000mm centres
3600	1200mm centres



■ RAPID WALL APPLICATIONS

# ESTIMATION GUIDE

## Drywall Grid – Grid Estimator per 100m<sup>2</sup>

MODULE 1200 x 600 MAIN TEES @ 1200mm CENTRES/SUSPENSION POINTS @ 1200mm CENTRES				
1200mm CROSS TEES @ 600mm CENTRES				
PART NUMBER	DESCRIPTION	METRES	PIECES	QUANTITY
RAP1	38mm x 38mm Main Tee	83	23	2 Boxes
RAP2	38mm x 38mm Cross Tee	167	139	4 Boxes
RAP31	Main Tee Suspension Clip	–	70	1 Pack
RAP6	40mm x 38mm Wall Track	40	12	1 Box

MODULE 1250 x 600 MAIN TEES @ 1250mm CENTRES/SUSPENSION POINTS @ 1200mm CENTRES				
1250mm CROSS TEES @ 600mm CENTRES				
PART NUMBER	DESCRIPTION	METRES	PIECES	QUANTITY
RAP1	38mm x 38mm Main Tee	80	22	2 Boxes
RAP2	38mm x 38mm Cross Tee	167	134	4 Boxes
RAP31	Main Tee Suspension Clip	–	67	1 Pack
RAP6	40mm x 38mm Wall Track	40	12	1 Box

MODULE 1600 x 600 MAIN TEES @ 1600mm CENTRES / SUSPENSION POINTS @ 900mm CENTRES				
1600mm CROSS TEES @ 600mm CENTRES				
PART NUMBER	DESCRIPTION	METRES	PIECES	QUANTITY
RAP1	38mm x 38mm Main Tee	63	18	2 Boxes
RAP2	38mm x 38mm Cross Tee	166	105	3 Boxes
RAP31	Main Tee Suspension Clip	–	70	1 Pack
RAP6	40mm x 38mm Wall Track	40	12	1 Box

MODULE 1200 x 450 MAIN TEES @ 1200mm CENTRES / SUSPENSION POINTS @ 1200mm CENTRES				
1200mm CROSS TEES @ 450mm CENTRES				
PART NUMBER	DESCRIPTION	METRES	PIECES	QUANTITY
RAP1	38mm x 38mm Main Tee	83	23	2 Boxes
RAP2	38mm x 38mm Cross Tee	223	186	6 Boxes
RAP31	Main Tee Suspension Clip	–	70	1 Pack
RAP6	40mm x 38mm Wall Track	40	12	1 Box

MODULE 1250 x 450 MAIN TEES @ 1250mm CENTRES/SUSPENSION POINTS @ 1200mm CENTRES				
1250mm CROSS TEES @ 450mm CENTRES				
PART NUMBER	DESCRIPTION	METRES	PIECES	QUANTITY
RAP1	38mm x 38mm Main Tee	80	22	2 Boxes
RAP2	38mm x 38mm Cross Tee	223	178	5 Boxes
RAP31	Main Tee Suspension Clip	–	67	1 Pack
RAP6	40mm x 38mm Wall Track	40	12	1 Box

MODULE 1600 x 450 MAIN TEES @ 1600mm CENTRES/SUSPENSION POINTS @ 900mm CENTRES				
1600mm CROSS TEES @ 450mm CENTRES				
PART NUMBER	DESCRIPTION	METRES	PIECES	QUANTITY
RAP1	38mm x 38mm Main Tee	63	18	2 Boxes
RAP2	38mm x 38mm Cross Tee	222	139	4 Boxes
RAP31	Main Tee Suspension Clip	–	70	1 Pack
RAP6	40mm x 38mm Wall Track	40	12	1 Box





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