RONDO Smart-Wall®





STANDARDS AND BUILDING CODES

Rondo Building Services uses the following Standards in its procurement, manufacturing, testing, design and marketing policies for compliance with the respective Building Codes of Australia and New Zealand:

Design Standards:	
AS/NZS1170 Part 0	Structural design actions - General Principles
AS/NZS1170 Part 1	Structural design actions - Permanent imposed and other actions
AS/NZS1170 Part 2	Structural design actions - Wind actions
AS/NZS1170 Part 4	Structural design actions - Earthquake actions in Australia
NZS1170 Part 5	Structural design actions - Earthquake actions in New Zealand
AS/NZS4600	Cold-formed steel structures
Steel is purchased to th AS1397	ne following standard: Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium

Quality Assurance	
ISO 9001	Quality Management Systems

INTRODUCTION

The Rondo Smart-Wall[®] Telescopic Prefabricated Stud Framing is unlike any other.

Rondo Smart-Wall[®] includes the next generation Rondo Smart-Stud[®] which is a telescopic Stud that can move within a 'C' Stud, allowing for easy height adjustment and quicker installations.

When using the Rondo Smart-Stud feature, the wall framing height can be easily adjusted to accommodate variances in the structure. This removes the need for cutting studs to length and offers a safer site with less wastage.

Rondo Smart-Wall[®] can be pre-fabricated by Rondo and delivered direct to site to speed up installation and reduce onsite labour costs. Alternatively, it can be flat packed with all components marked out, allowing assembly to take place away from services.

SUITABLE FOR

- Internal Non-Load Bearing Walls
- Bulkheads
- Refurbishments
- Fire rated applications*
- Seismic Designs available

SPECIAL FEATURES

- Reduced on-site wastage
- Ability to accommodate the variations in the structure, without the need for cutting
- Minimal site noise pollution due to reduced cutting of steel
- System flexibility to allow on site adjustments
- Hot dipped galvanised for superior corrosion resistance
- Reduced onsite installation time
- Easy installation

IMPORTANT NOTES:

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.

* Fire rating of framing to be confirmed by lining board manufacturer.

CONTENTS:

RONDO SMART-WALL® COMPONENTS	2
PRODUCT DATA SPECIFICATIONS	3
RONDO SMART-WALL® APPLICATIONS	6
RONDO SMART-WALL® CONNECTIONS	8
ORDERING PROCESS	10
PROJECT PLANS	11
INSTALLATION LABELLING	12
TYPICAL DETAILS	13
INSTALLATION GUIDE	17

RONDO SMART-WALL® COMPONENTS

64MM 0.55BMT

6451	64mm (w) x 41mm (h) Prefab 'C' Steel Stud with Lip
6452	64mm (w) x 39mm (h) Prefab 'R' Steel Stud with Lip
6453	64mm (w) x 41mm (h) Prefab 'C' Steel Track with Lip
6454	64mm (w) x 48mm (h) Prefab 'U' Steel Track
6455	64mm (w) x 41mm (h) Prefab 'C' Steel Nogging with Lip
6456	64mm (w) x 48mm (h) Prefab 'U' Steel Nogging

64MM 0.75BMT

6471	64mm (w) x 41mm (h) Prefab 'C' Steel Stud with Lip
6472	64mm (w) x 39mm (h) Prefab 'R' Steel Stud with Lip
6473	64mm (w) x 41mm (h) Prefab 'C' Steel Track with Lip
6474	64mm (w) x 48mm (h) Prefab 'U' Steel Track
6475	64mm (w) x 41mm (h) Prefab 'C' Steel Nogging with Lip
6476	64mm (w) x 48mm (h) Prefab 'U' Steel Nogging

92MM 0.55BMT

9251	92mm (w) x 41mm (h) Prefab 'C' Steel Stud with Lip
9252	92mm (w) x 39mm (h) Prefab 'R' Steel Stud with Lip
9253	92mm (w) x 41mm (h) Prefab 'C' Steel Track with Lip
9254	92mm (w) x 48mm (h) Prefab 'U' Steel Track
9255	92mm (w) x 41mm (h) Prefab 'C' Steel Nogging with Lip
9256	92mm (w) x 48mm (h) Prefab 'U' Steel Nogging

92MM 0.75BMT

9271	92mm (w) x 41mm (h) Prefab 'C' Steel Stud with Lip
9272	92mm (w) x 39mm (h) Prefab 'R' Steel Stud with Lip
9273	92mm (w) x 41mm (h) Prefab 'C' Steel Track with Lip
9274	92mm (w) x 48mm (h) Prefab 'U' Steel Track
9275	92mm (w) x 41mm (h) Prefab 'C' Steel Nogging with Lip
9276	92mm (w) x 48mm (h) Prefab 'U' Steel Nogging





6453 / 6473 9253 / 9273



6455 / 6475 9255 / 9275



9252 / 9272



6454 / 6474 9254 / 9274



9256 / 9276

PRODUCT DATA SPECIFICATIONS

RONDO SMART-STUD®

The Rondo SMART-WALL System comprises two SMART-STUDS - a C stud and an R stud profile.

The Rondo SMART-STUD C profile is similar to a traditional Rondo steel stud, except that it is proportioned to allow nesting of the Rondo SMART-STUD R profile, in a web-to-web orientation.

When the SMART-STUDS are nested together, they have the ability to "telescope" up or down to accommodate variations in the structure.

Where necessary, the "telescopic" feature can be fabricated to allow for wall panel length adjustment as well. Thus, providing adjustment in a horizontal and vertical plane simultaneously.

40



	PART NO	DESCRIPTION	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	GAUGE (bmt)
	6451	Prefab 'C' Steel Stud with Lip	Made to Order	41.30	63.50	0.55
ר ר <u>⊺</u>	6471					0.75
41.3mm	9251				91.50	0.55
	9271					0.75
	6452	Prefab 'R' Steel Stud with Lip	Made to Order	39.80	61.70	0.55
	6472					0.75
39.8mm	9252				89.90	0.55
WIDTH	9272					0.75

STEEL GRADE: Zinc Hi-ten G550 Yield Strength: 550MPa Tensile Strength: 550MPa

FEATURES:

- 32mm service holes are included for ease of services to pass through
- Pre-punched holes to allow quick and easy screw fixing
- Dimples at each connection point which provides a positive and accurate location of the components
- Swaging at the bottom of the studs to allow easy insertion into the wall track
- Telescopic Stud Connection holes are provided on predefined location on the C – Stud for easy installation



PRODUCT DATA SPECIFICATIONS (continued)

WALL TRACK AND SLOTTED DEFLECTION HEAD TRACK

A BUTTO	PART NO	DESCRIPTION	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	GAUGE (bmt)
	6453	Prefab 'C' Steel Track with Lip	Made to Order	41.30	63.50	0.55
	6473					0.75
WIDTH	9253				91.60	0.55
	9273					0.75
	6454	Prefab 'U' Steel Track	Made to Order	47.50	63.50	0.55
47.5mm	6474					0.75
	9254					0.55
WIDTH	9274				91.50	0.75

FEATURES:

• Dimples – For ease of installation, SMART-STUDs, wall tracks and noggings are pre-punched and dimpled at each connection point. The dimples provide positive and accurate location of the components and the pre-punched holes allows quick and easy screw fixing.



• Stud Connection to C Track – the leg of the C track is notched, and a dimple and fixing hole is provided at the stud to track connection position







• The U Deflection Head Track has a 30mm vertical slot which, provides a positive location for the SMART STUD, allows for incremental slab deflection and negates the need for an additional nogging at the head track.



STEEL NOGGING

and and						
y v w	PART NO	DESCRIPTION	LENGTH (mm)	HEIGHT (mm)	WIDTH (mm)	GAUGE (bmt)
	6455	Prefab 'C' Steel Nogging with Lip	Made to Order	41.30	63.50	0.55
	6475					0.75
41.3mm	9255				91.50	0.55
	9275					0.75
1 17	6456	Prefab 'U' Steel Nogging	Made to	47.50	63.50	0.55
47.5mm	6476					0.75
	9256		Order		91.50	0.55
	9276					0.75

FEATURES:

- The Steel Nogging Track is designed to support both the stud and linings. Stud Connection the large opening on the nogging allows the stud to pass through and similar to the track, the leg of the nogging is notched, and a dimple hole is provided for easy installation





RONDO SMART-WALL® APPLICATIONS

Rondo Smart-Wall[®] is a versatile system that can be used in multiple locations within a building and in a range of applications.

PRE-FABRICATED WALLS

Rondo Smart-Wall[®] can be pre-fabricated by Rondo and delivered direct to site to speed up installation and reduce onsite labour costs.

> height can be adjusted to suit"

BULKHEADS

Bulkheads can be installed at a faster speed than the traditional method as a result of pre assembled frames completed by Rondo off-site. With Rondo SMART-STUD[®], the drop of the bulkhead can be easily adjusted to suit the site requirements.

STREET STREET

height can be adjusted to suit"

RAKED CEILING

Installing a wall to the underside of a raked ceiling is time consuming as each stud needs to be individually cut to length. The Rondo SMART-WALL eliminates this problem due to the telescopic nature of the SMART-STUD. The wall panels can simply be extended to achieve the required slope.



REFURBISHMENT

Refurbishment projects have limited access to move products between levels and on-site work space. Rondo Smart-Wall[®] with a centre splice allows the frame to be reduced to fit into an alimac or lift and moved to the required location.







TYPICAL SPLICE DETAIL







COMMON STUD HEAD TRACK DETAIL



NOGGING TRACK END DETAIL



COMMON STUD NOGGING DETAIL



END STUD BASE TRACK DETAIL



COMMON STUD BASE TRACK DETAIL

ORDERING PROCESS

The following diagram shows you the ordering process for SMART-WALL with options for either Prefabricated or Flat Packed.



PROJECT PLANS

Two sets of plans will be included with every Rondo Smart-Wall framing system, (1) the floor plans and (2) the wall panel assembly plans.

THE FLOOR PLANS

The floor plans provide the set-out of the individual wall panels over the architectural floor plans.

These plans also provide a directional marker which indicates the direction from which the individual wall panel is viewed. This ensures the wall panels are installed in the correct orientation.

It is important that these plans are thoroughly checked and approved by the customer to ensure they align with the final approved plans on site.



FLOOR PLAN



WALL PANEL ASSEMBLY PLANS

The wall panel assembly plans provide the individual wall panel overall dimensions, member schedule, assembly details and orientation of components.

The component numbering on these plans match to the ink-jetting of the components to facilitate construction on-site for stick form supply.

It is important that these plans are thoroughly checked and approved by the customer to ensure they align with the final approved plans on site.

DISCLAIMER

It is the responsibility of the customer to check and verify the accuracy of the plans provided. Rondo cannot accept responsibility for the coordination of the plans to the actual site conditions, and can only prepare the plans based on the architectural plans provided.

ASSEMBLY PLAN

INSTALLATION LABELLING

To help identify the components onsite, each component is labelled with a unique code. This unique code indicates the Component Number, Wall Frame Number, Project Number and Floor Level for which the panel is to be installed.



INSTALLATION LABEL



INSTALLATION LABEL ON COMPONENTS

TYPICAL DETAILS

Rondo Smart-Wall can readily be used in non-fire rated applications, and the following details provide typical construction details on site. For fire rated construction, Rondo recommends the specific construction details to be coordinated with their preferred board manufacturer to ensure compliance.



U SLOTTED DEFLECTION HEAD TRACK - LINE ONE SIDE -NON-FIRE RATED



U SLOTTED DEFLECTION HEAD TRACK - LINED BOTH SIDES -NON-FIRE RATED



TYPICAL DETAILS (continued)



ABUTMENT TO OTHER WALLS



ANGLED WALL - NON-FIRE RATED



WALL T JUNCTION - NON-FIRE RATED



WALL CORNER JUNCTION - NON-FIRE RATED

TYPICAL DETAILS (continued)



DOOR INSTALLATION USING SMART-STUD

INSTALLATION GUIDE

If ordering SMART-WALL flat packed, start at Step 1 and if ordered prefabricated, start at Step 8.

STEP 1 Review the floor plan and count the number of wall panels. Check all wall panels are supplied. Determine wall panel installation process.

The Rondo Wall Panels will be individually packed, so locate the first Rondo Wall Panel to be assembled and unpack all the components.



ASSEMBLY PLAN

STEP 2 Lay the Wall Track on the ground or on an assembly table



INSTALLATION GUIDE (continued)

STEP 3 Pre-assemble the R - Telescopic Stud into the C - Studs for all the common studs within the wall panel. Ensure the studs are nested web to web. <u>Do</u> <u>not</u> BOX the studs.



R – TELESCOPIC STEEL STUD INSERTED INTO THE C – STEEL STUD

STEP 4 Place the swaged end of the nested C-Stud into the base track at the pre-punched locations, per the Wall Assembly Plan. Ensure the studs are orientated correctly, with the open side facing in the same direction.





DEFLECTION HEAD TRACK IN POSITION

INSTALLATION GUIDE (continued)

STEP 7 Ensure all the connection points are fitted with a #10G Wafer head self-drilling screw. Rondo recommends a zinc plated coating as a minimum, for internal benign environments.

STEP 8 Flip the wall panel over and ensure all connection points on the opposite side are screwed off as well.

COMPLETED FRAME WITH SCREW FIXINGS

STEP 9 Align the wall frame with the floor setout position and anchor it using the approved fixings.



WALL FRAME FIXED TO FLOOR WITH APPROVED FIXINGS

STEP 10 Slide the head track and telescopic R-Stud up to the underside of the slab above. Align the wall panel to the setout, and ensure the wall panel is not skewed. Fix the track in position with approved fasteners at not more than 600mm centres. Check there is more or less, adjust the R-Stud position to maintain this gap as necessary.



FIXING INTO SLOTTED DEFLECTION HEAD TRACK

STEP 11 Using #10G Wafer head self-drilling screws, fix the R-Telescopic and C Stud together as detailed below, subject to wall lining conditions. Where the wall is unlined at the splice location, secure the two studs together using 4/#10G located in the extreme top and bottom holes.



WALLS LINED ONE SIDE ONLY



WALLS LINED BOTH SIDES

RONDO OFFICES

AUSTRALIA

1300–36–RONDO (1300–36–7663)	enquiries: rondo@rondo.com.au	
NEW SOUTH WALES (HEAD OFFICE)		
57–87 Lockwood Road, Erskine Park NSW 2759	enquiries: nsw@rondo.com.au	phone: 61–2–9912 7300
(PO Box 324 St Marys NSW 1790)	orders.nsw@rondo.com.au	
VICTORIA		
1 Columbia Court, Dandenong South VIC 3175	enquiries: vic@rondo.com.au	phone: 61–3–8561 2222
(PO Box 4458 Dandenong South, VIC 3164)	orders.vic@rondo.com.au	
QUEENSLAND		
13 Binary Street, Yatala QLD 4207	enquiries: qld@rondo.com.au	phone: 61–7–3442 6400
	orders.qid@rondo.com.au	
39 George Street	enquiries: sa@rondo.com.au	nhone: 61_8_8256 5900
Green Fields SA 5107	orders.sa@rondo.com.au	phone. 01 0 0200 0000
WESTERN AUSTRALIA		
15 Glassford Road, Kewdale WA 6105	enquiries: wa@rondo.com.au	phone: 61–8–9251 9400
(PO Box 168 Cloverdale WA 6985)	orders.wa@rondo.com.au	
EXPORT		
phone: 60–1–2386 1860	enquiries: export@rondo.com.au	
www.rondo.com.au		
NEW ZEALAND		
RONDO BUILDING SERVICES PTY LTD		
FREE CALL: 0800-0800-RONDO (0800-0800-76)		
AUCKLAND		
1/118 Savill Drive	enquiries:	
Mangere East Auckland 2024	rondo.newzealand@rondo.co.nz	phone: 64–9–636 5110
(PO Box 12464 Penrose Auckland 1642)		
CHRISTCHURCH		
106 F Carmen Road, Hornby Christchurch 8042		
www.rondo.co.nz		
MALAYSIA		
RONDO METAL SYSTEMS SDN BHD		
LOT 606, Jalan Lagoon Selatan	enquiries:	
4/500 Subang Jaya	rondo.malaysia@rondo.com.my	pnone: 60–3–5614-9888

UAE

www.rondo.asia

RONDO METAL PRODUCTS SDN BHD

Office 2302, Bayswater Tower, Business Bay Dubai UAE (PO Box 14424 Dubai UAE) *www.rondo.asia*

phone: 971-4-2947959



RONDO Smart-Wall®



Rondo SMART-WALL® is unlike the others.

It includes the next generation Rondo SMART-STUD[®] which is a telescopic Stud that can move within itself, allowing for easy height adjustment and quicker installations.

By using Rondo SMART-STUD[®], installers can simply change the height of the wall frame to accommodate variances in the slab. This removes the need for cutting studs to length and offers a safer site with less wastage.

Rondo SMART-WALL[®] can be pre-fabricated by Rondo and delivered to projects within QLD to speed up installation and reduce onsite labour costs. Alternatively, it can be flat packed with all components marked out, allowing assembly to take place away from services.



we're behind the best buildings



we're behind the best buildings

RONDO Smart-Wall[®]

PREFABRICATED TELESCOPIC STUD INSTALLATION MANUAL





HEAD OFFICE 20 Fortune Avenue, corner Santan Street, Brgy. Fortune, Marikina City,1809 PH Phone: +63(2) 8790-1000

DAVAO OFFICE

Unit 01-02 Tristar Warehouse, KM 11 Brgy. Communal Diversion Rd., Davao City, 8000 PH Phone: +63 (82) 234-0911 to 14 Email: info@worldhomedepot.com Email: info.davao@worldhomedepot.com