

**Weldlok®**

# MONO STRINGER

Product Guide



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**NEPEAN**  
Building &  
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## WELDLOK® MONO STRINGER KITS

Ordering a **Weldlok® Mono Stringer Kit** is simple. Use this order form on the inside back page to complete the required dimensions and select the applicable options.

### KIT 1 - TOP MOUNT Optional Balustrade



Treads	Item no.	Treads	Item no.
2 Steps	STM2BALWIRE-KIT	10 Steps	STM10BALWIRE-KIT
3 Steps	STM3BALWIRE-KIT	11 Steps	STM11BALWIRE-KIT
4 Steps	STM4BALWIRE-KIT	12 Steps	STM12BALWIRE-KIT
5 Steps	STM5BALWIRE-KIT	13 Steps	STM13BALWIRE-KIT
6 Steps	STM6BALWIRE-KIT	14 Steps	STM14BALWIRE-KIT
7 Steps	STM2BALWIRE-KIT	15 Steps	STM15BALWIRE-KIT
8 Steps	STM2BALWIRE-KIT	16 Steps	STM16BALWIRE-KIT
9 Steps	STM2BALWIRE-KIT	17 Steps	STM17BALWIRE-KIT

### KIT 2 - SIDE MOUNT Optional Balustrade



Treads	Item no.	Treads	Item no.
2 Steps	STM2BALWIRE-KIT	10 Steps	STM10BALWIRE-KIT
3 Steps	STM3BALWIRE-KIT	11 Steps	STM11BALWIRE-KIT
4 Steps	STM4BALWIRE-KIT	12 Steps	STM12BALWIRE-KIT
5 Steps	STM5BALWIRE-KIT	13 Steps	STM13BALWIRE-KIT
6 Steps	STM6BALWIRE-KIT	14 Steps	STM14BALWIRE-KIT
7 Steps	STM2BALWIRE-KIT	15 Steps	STM15BALWIRE-KIT
8 Steps	STM2BALWIRE-KIT	16 Steps	STM16BALWIRE-KIT
9 Steps	STM2BALWIRE-KIT	17 Steps	STM17BALWIRE-KIT

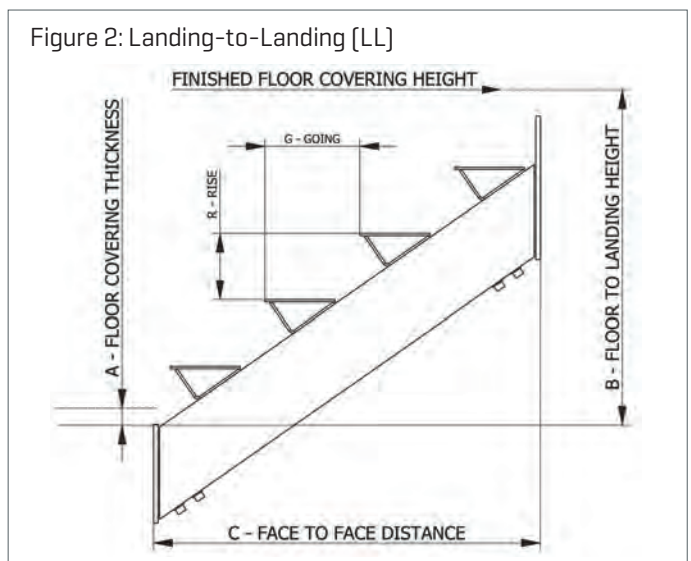
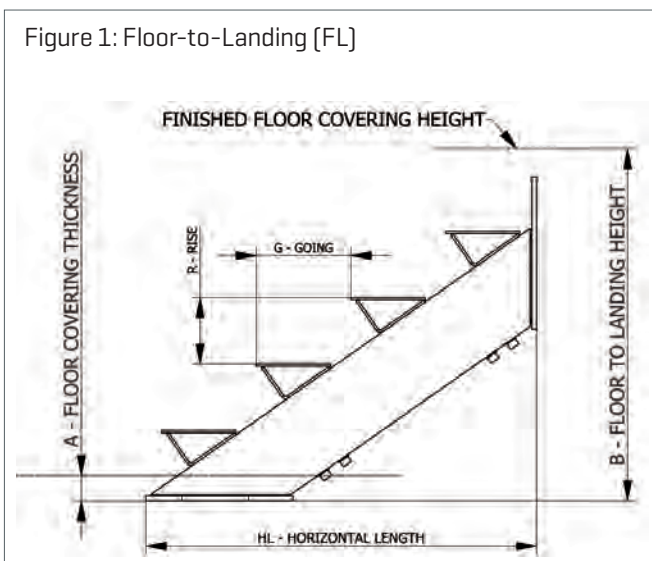
### ENGINEERING CERTIFIED • INTERNAL & EXTERNAL • EASY INSTALLATION

The **Weldlok® Mono Stringer** is an aesthetic residential solution for internal or external stairs in today's modern open plan living spaces. The **Weldlok® Mono Stringer** is certified to meet the Building Code of Australia [BCA] and all relevant Australian Standards.

# WELDLOK® MONO STRINGER ORDERING GUIDE

Ordering a **Weldlok® Mono Stringer** is simple. Use this Selection Guide to help complete the Specifications Checklist to build your Mono Stringer.

1. Determine if the stringer is required Floor-to-Landing (Figure 1) or Landing-to-Landing (Figure 2); or both.
2. For Floor-to-Landing, what are the Finished Floor Heights including tiles and other floor coverings above the base floor level? For Landing-to-Landing, what is the Face-to-Face distance?



**Note 1:** Finished Floor Heights are critical to ensure the even spacing of tread risers for comfort, standards compliance and quality appearance.

**Note 2:** Dimension C in figure 2 can be calculated if dimensions A and B are known. Contact Weldlok to obtain dimension C and confirm ability to install.

3. Calculate the number of steps [Risers] for your **Weldlok® Mono Stringer**:

Total Height (B)		Horizontal Length (HL)		Number of Risers (QR)	Number of Treads (QT)	Rise (R)		Tread Thickness (TT)		Going (G)	
Min	Max	Min	Max			Min	Max	Min for 168 (R)	Min for 185 (R)	Min	Max
504	555	511	559	3	2	168	185	45	60	236	236
672	740	751	824	4	3	168	185	45	60	236	236
840	925	991	1088	5	4	168	185	45	60	236	250
1008	1110	1231	1352	6	5	168	185	45	60	236	250
1176	1295	1471	1616	7	6	168	185	45	60	236	264
1344	1480	1711	1880	8	7	168	185	45	60	236	264
1512	1665	1950	2145	9	8	168	185	45	60	236	243
1680	1850	2190	2409	10	9	168	185	45	60	236	243
1848	2035	2430	2673	11	10	168	185	45	60	236	257

3. Continued...

Total Height (B)		Horizontal Length (HL)		Number of Risers (QR)	Number of Treads (QT)	Rise (R)		Tread Thickness (TT)		Going (G)	
Min	Max	Min	Max			Min	Max	Min for 168 (R)	Min for 185 (R)	Min	Max
2016	2220	2670	2937	12	11	168	185	45	60	236	257
2184	2405	2910	3201	13	12	168	185	45	60	236	236
2352	2590	3150	3466	14	13	168	185	45	60	236	236
2520	2775	3390	3730	15	14	168	185	45	60	240	250
2688	2960	3630	3994	16	15	168	185	45	60	240	250
2856	3145	3870	4258	17	16	168	185	45	60	240	264
3024	3330	4110	4523	18	17	168	185	45	60	240	264

**Note:**

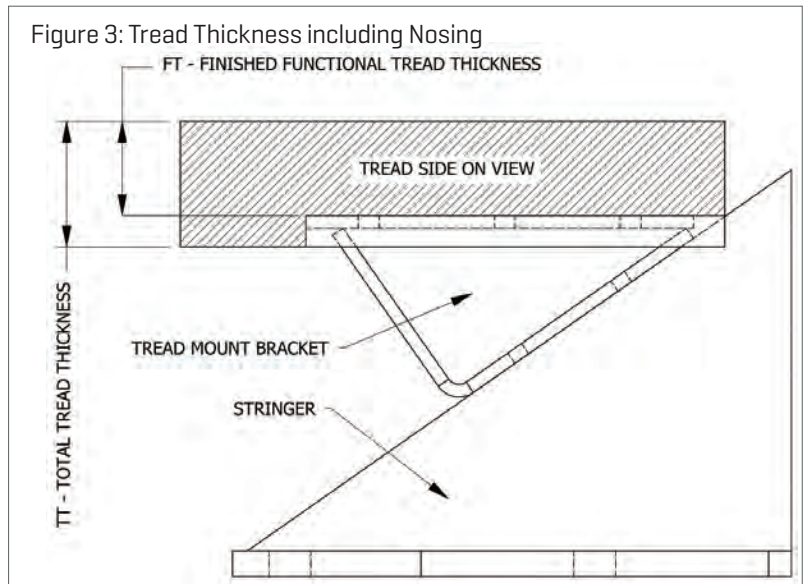
- > All Weldlok® Mono Stringers have a 35 degree slope for improved comfort in a residential application.
- > Weldlok® recommends a minimum finished functional tread thickness (FT) of 45mm.
- > The maximum permissible gap between treads is 125mm. This can be achieved by adding a nosing as shown in Figure 3.
- > This table ensures that your Mono Stringer meets the Permissible Slope Relationship of (2 x R+G) as defined in AS1657 and the Building Code of Australia.

4. What is the Finished Functional Tread Thickness (FT)?  
[If treads are customer supplied]

- >  $180 - (45 + 125) = 10$ .  
A tread nosing is therefore required.

**Important:**

The functional tread thickness (FT) is the distance from the top surface to underside surface not including any nosing or skirting affixed to the front of the tread.



5. Will the Weldlok® Mono Stringer be installed externally or in close proximity to moisture?

The Weldlok® Mono Stringer is available in a durable hot-dip galvanised finish recommended for external use where it may be subjected to rain or moisture.

6. Complete your Mono Stringer Specification Checklist on the form on the inside back cover.

## FEATURES AND BENEFITS OF THE **WELDLOK**® MONO STRINGER

- > Simple design that provides an attractive architectural feature.
- > Complies with Australian Standards and the BCA. Certified for residential use.
- > Floor-to-Landing (FL) and Landing to-Landing (LL) options for multistorey dwellings.
- > Provides safe access to upper levels. Proof loaded to 3,200kg on 17 treads.
- > Range from 2 to 17 treads for vertical clearances from 504mm to 3,330mm.
- > Internal and external use.
- > Designed to suit stair tread dimensions of 900mm to 1,200mm in width, 250mm to 300mm depth and 45mm to 75mm thickness.
- > Finishes include untreated steel, powder coat, hot-dip galvanised, and hot-dip galvanised then powder coated.

*Note: Hot Dip Galvanised finish is recommended for external use.*



# WELDLOK® MONO STRINGER INSTALLATION GUIDE

Your **WELDLOK®** Mono-Stringer has been engineered to comply with the National Construction Code 2016 when installed in accordance with the following instructions. For further information go to [www.weldlok.com.au](http://www.weldlok.com.au)

**STEP 1** Ensure that the top and bottom mounting brackets are square to the Stringer beam. Tighten the four (4) M16 Socket Head Cap Screws to 120 Nm (88 ft/lb).



**STEP 2** Mark the centreline of the desired stair location.

**STEP 3** Set up a level at the top finished floor height.

**STEP 4** Trim or Fold the provided marking template (reverse side of this document) to the correct riser (R).

**STEP 5** Set the template so as the centre line is vertical and the top is in contact with the underside of the level (Step 3).

**STEP 6** Mark the four (4) hole centres. This builder is utilising a 6mm Dyna drill to accomplish this.

**STEP 7** Drill the marked hole the correct size for the desired fixing method. (Minimum M12 fixing for Concrete, and M16 fixing for Timber).

**STEP 8** If using Chemstuds or Dyna bolts set these at the desired depth.

**STEP 9** Lift the Stringer assembly into place (it is best to have the unit slightly top heavy).



**STEP 10** Loosely tighten the top fixings to allow for adjustments of levels and alignments.

**STEP 11** Level the top tread whilst ensuring the stringer is in the desired location at both top and bottom. Wedges or spacers may be required depending on the accuracy of the substrate.

**STEP 12** Drill the bottom holes. In most cases this is achievable without removing the Stringer. On odd occasions depending on the bottom finished floor height the stringer may need to be removed.

**STEP 13** Once the Stringer is levelled in the correct location tighten the mounting bolts to the recommended torques.

**STEP 14** Fit your selected stair treads.

**STEP 15** Install your selected Handrail or Balustrade in accordance with BCA requirements.







## NEPEAN Building and Infrastructure

Originally founded as Graham Group, NEPEAN Building & Infrastructure is one of Australia's largest fully integrated manufacturer and supplier of metal products for the industrial and commercial building sectors.

## Weldlok®

Grating, handrail and drainage products

## Galintel®

Galvanised steel lintels and retaining wall posts

## Mastermesh®

Expanded and perforated metals

## Galserv®

Hot-dip galvanising

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