



FlexFence to MashFlex® WRSB Upgrade

Upgrade your FlexFence to new crash test standard MASH TL4

MASH TL4 COMPLIANT

Upgrade your existing FlexFence Wire Rope Safety Barrier (WRSB) system to the MASH TL4 compliant MashFlex WRSB in a cost-efficient way with a simple upgrade kit.

Existing runs of TL3 or TL4 Flexfence can be upgraded with the upgrade kit while reusing the existing cables, post footings and anchor blocks. The kit consists of a sleeve packer and stiffening insert, making the old post footing compliant. The standard MashFlex post and post-cap can then be installed into the old foundation

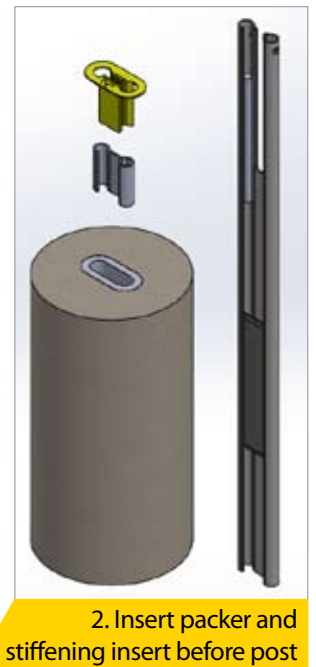
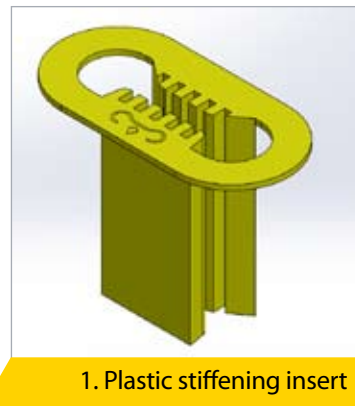


SUPERIOR COST SAVINGS

Simple and Cost-Efficient Changeover to Superior MashFlex

Features & Benefits

- **Extremely cost-efficient upgrade**
Concrete installation and cables are a significant cost portion of a new WRSB install.
- **No need to pour new concrete footings**
Existing FlexFence concrete post footings can be used to upgrade to the superior MashFlex system.
- **All standard components**
After upgrade kit has been installed, the run will use all standard MashFlex components.
- **Reuse the existing FlexFence cable**
Depending on age and condition, the FlexFence cables can be reused in the MashFlex install.
- **Reduce traffic control**
Fast and efficient changeover means reduced traffic control measures - meaning reduced live traffic exposure for work crews and reduced traffic interruption.
- **Reduce installation costs**
No new concrete required, no new wire rope required, fast changeover and less traffic control all results in less labour
- **Utilise your existing TL3 Terminals**
No additional posts or anchor blocks required to update your FlexFence TL3 Terminal to MashFlex.



MashFlex®

MASH TL4 COMPLIANT

Flexfence to MashFlex Upgrade - Installation Checklist

Customer: _____

Project: _____

Fence ID: _____

Fence Length: _____

Ambient Temperature: _____

Tensioning Force: _____

Fence Length: _____

Signed: _____

Date: _____

End Anchors

Is the anchor block dimensions in accordance with Ingal drawings	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has the anchor cable locking bolt been installed with nuts tightened to snug	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has each end fitting been secured with one washer and two nuts	<input type="checkbox"/> Yes	<input type="checkbox"/> No

End Terminal Posts

Have the posts been installed at the correct spacing (WR-STD-89)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have the posts been installed with the correct orientation towards approaching traffic	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have ground covers been attached to the posts	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have steel spacers been inserted between each cable	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has the stainless frame been inserted between the top and second from top cable	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have post caps been attached to the posts	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has delineation been attached to the post caps	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Cable

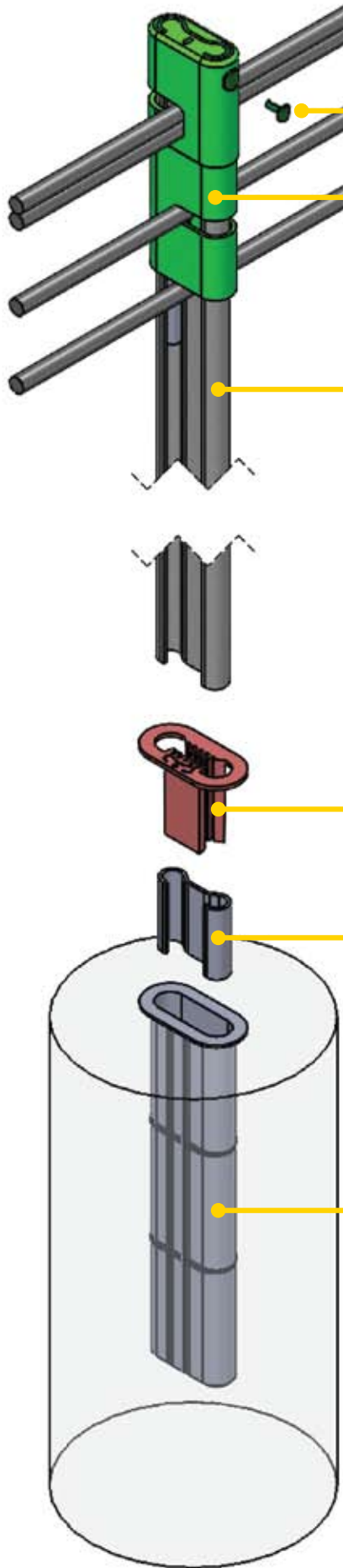
If reusing existing cable, has the cable been examined for damage (Table 6 of MashFlex manual)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Tension Bays

Have tension bays been installed at not more than 150m from the end anchors	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have tension Bays been installed at not more than 300m apart	<input type="checkbox"/> Yes	<input type="checkbox"/> No

MashFlex Posts

Has a MashFlex plug been inserted into each cap	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is the cable order consistent throughout the run	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has the upgrade plastic insert been installed to ground level with all posts	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has delineation been attached to the post caps	<input type="checkbox"/> Yes	<input type="checkbox"/> No



10009421 MashFlex Plug

10009397 MashFlex Cap

MashFlex Post 1230mm

MashFlex[®]

MASH TL4 COMPLIANT

10009981 Upgrade Plastic Insert

10009955 Upgrade Packer

Existing Flexfence concrete post footing and sleeve

Kit Number	Description
10009890	Flexfence to MashFlex Upgrade kit - White Post
10010042	Flexfence to MashFlex Upgrade kit - Green Post
10010043	Flexfence to MashFlex Upgrade kit - Gal Post

REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
X	XXXXXX	XXXXXX	XX	XX	XX

	NAME	DATE
DRAWN	VB	31/08/2021
CHECKED	LG	31/08/2021
APPROVED	LG	31/08/2021
SCALE		
ISSUE FOR		

INGAL CIVIL PRODUCTS
A valmont COMPANY

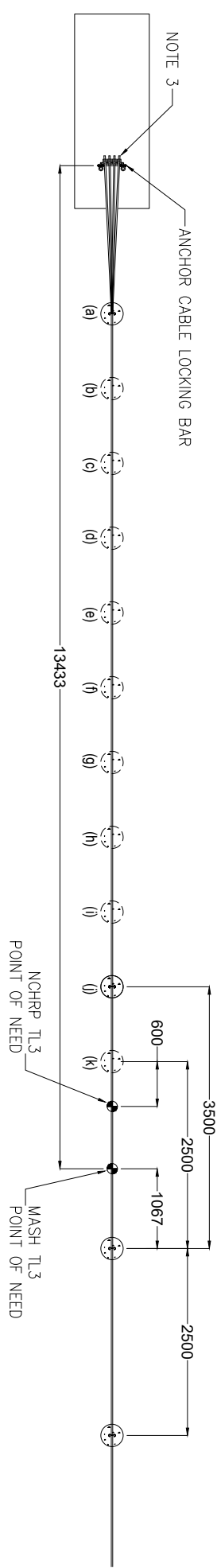
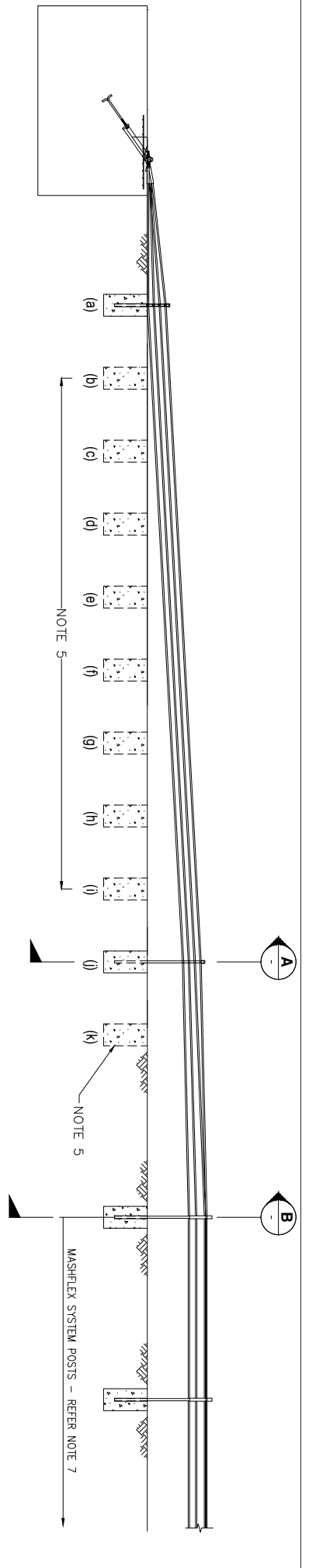
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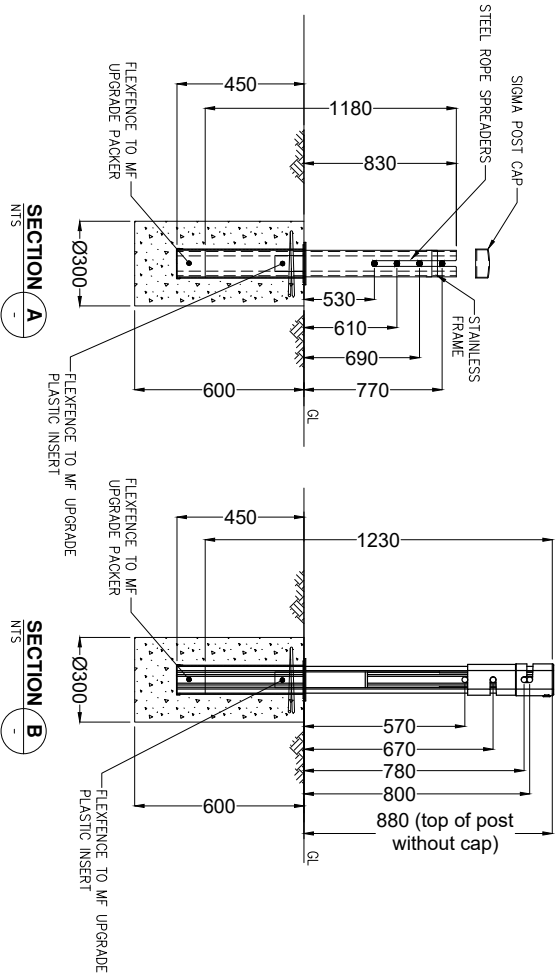
PH. +61 2 9827 3333
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PROJECT	WIRE ROPE SAFETY BARRIER
TITLE	FLEXFENCE UPGRADE TO MASHFLEX COMPONENT ASSEMBLY

INGAL CIVIL PRODUCTS PART No.	
DRAWING No.	WR-STD-90



ITEM No.	POST LENGTH
g	700
j	1180



- NOTES:
1. DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE STATED.
 2. TO BE READ IN CONJUNCTION WITH THE MASHFLEX PRODUCT MANUAL.
 3. BOTTOM CABLE TO BE INSERTED INTO ANCHOR BRACKET SLOT NEAREST TRAFFIC. REFER SECTION 6.6 OF MASHFLEX PRODUCT MANUAL.
 4. CABLE LOCKING BAR TO BE INSERTED INTO ANCHOR BRACKET.
 5. NO POSTS TO BE INSTALLED AT LOCATIONS (b) THRU (j) AND (k).
 6. STEEL ROPE SPREADERS TO BE USED AT LOCATIONS (c) AND (i).
 7. FOR MASHFLEX POST ASSEMBLY, REFER DRAWING WR-MF-001.

REVISONS		REFERENCES		DRAWING AND CONTENTS ARE COPYRIGHT TO INGAL CIVIL PRODUCTS AND CAN ONLY BE USED BY THE WRITTEN CONSENT FROM INGAL CIVIL PRODUCTS		PROJECT		DRAWING No.	
REV	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED	SCALE	ISSUE FOR	NAME	DATE
1	08/04/2021	AS PER DESIGNER'S COMMENTS AND MATERIALS INSERT NOTES UPDATED	VB	LG	LG			LG	15-08-2020
								VB	08/04/2021
								LG	08/04/2021
								N.T.S. @ A3	
								INGAL CIVIL PRODUCTS	
								FLEXFENCE WRSB UPGRADE TO MASHFLEX GENERAL ARRANGEMENT	
								WR-STD-89	
								Rev: 1	