

Technical Bulletin

TB 0346 – Changes to the equipment attached to composite crossarms

Date: 19/12/2023

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Purpose

To inform about additional changes related to composite crossarm types and the equipment attached to them since their initial introduction.

Background

Composite crossarms were introduced into Endeavour Energy network in 2022, and we are currently in the process of a full transition from timber crossarms to composite crossarms. Following field trials and ongoing installations, consultations with field staff revealed opportunities for further enhancements related to equipment on composite crossarms, and these improvements have now been implemented.

Actions

1. Supporting brackets to overcome the need to drill

As communicated before, all composite crossarms are delivered with pre-drilled patterns to suit standard construction types. However, it is noted that occasionally onsite drilling is required, either to make installation more efficient or to avoid complete replacement of an existing crossarm. Based on trials and consultation with other Distribution network service providers, a consensus was reached to use an easy to install universal bracket as a substitute for the need to drill crossarms.



Type A Bracket



Type B Bracket

Table 1: Universal support brackets

	Description	Material number
Type A	Support Bracket for 100X100 crossarm	1000008816
Type B	Support Bracket for 125X125 crossarm	1000008815

2. Installation of small wires

Self-tapping screws can be used to attach wiring to composite crossarms with standard saddles. The material number 1000008869 for 25mm self-tapping screws (Pack size 50) is available in the stores.

Below pictures shows the approved and recommended method of attaching the small wires.



3. Links/Fuses

Current LV fuse and Links mounting brackets are supplied with spikes to be carved into the timber crossarms and it will damage the top layer if used on composite crossarm. A new set of LV fuses and links **without spikes** as in Table 2 will be available in the stores.

Table 2: LV links and switch/fuse without spikes

Description	Material number
630A LV solid link for composite crossarms	1000009473
400A LV Switch/fuse for composite crossarms	1000009474

Note: Current stocks of 1000007797 & 1000007798 is to be used only on timber crossarms for F&E works.

4. Changes to dimension and other hardware mounting

(a) Street light bracket (XA-050 LV box urban arm)

Two additional holes have been incorporated into the XA050 crossarm to facilitate the mounting of SL brackets on the LV Box arm arrangement. The new stock of XA050 will come with these added holes.

(b) Attach existing services XA050 LV box urban arm

To re-attach the existing services on the LV box composite crossarm, use the Type A Support Bracket below the proposed SL bracket location and for further support to avoid this bracket sliding down the pole fix a tapping screw to the hole that is already available at the centre of this bracket. Option to re-attach existing wedge clamps services to the available holes in the Type A bracket or to the ring.



(c) XA 040 Recloser/regulator crossarm

The length of the crossarm is 2700mm and the holes have been adjusted based on feedback from field employees.

5. Exceptional use of timber crossarms

The following timber crossarms are allowed to be used due to possible slipping on HV sub platform (XA 055) when wet and the need to accommodate telco assets. The LV sub urban box crossarm can be cut to suit when doing modifications on existing box arms.

Description	Material number
HV sub platform timber crossarm XA 055 (200x100x1800mm)	1000007502
LV sub urban box timber crossarm XA 050 (100x100x1465mm)	1000009474

Note: XA050 composite crossarms must be used for all new LV urban box construction

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Implementation

The contents of this technical bulletin will be implemented immediately for all composite crossarm installations however the current stock of timber crossarms and associated hardware to be utilised until the current stock is depleted.

Impacted Standards

The contents of this technical bulletin will be included in the next update of MCI0005– Overhead construction Manual and associated drawings.

Contacts

For further information contact:

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