

# COPTTM NOTICE: REVISED REQUIREMENTS FOR SECTION B1, B2, B3 AND B4 OF THE COPTTM

LEAD SAFETY ADVISOR, ROADS & ROADSIDES

1 JULY 2020

1.0

Item	Comment
<b>Circulation</b>	<p>All users of the Code of Practice for Temporary Traffic Management (CoPTTM) and the Waka Kotahi website.</p> <p>Please forward to other interested parties.</p>
<b>Objective</b>	<p>To update the November 2018 version of the Fourth Edition of the CoPTTM for:</p> <ul style="list-style-type: none"> <li>• Revised requirements for Section B1 Signs (including stands and supports)</li> <li>• Revised requirements for B2 Delineation devices</li> <li>• Revised requirements for B3 High visibility garments</li> <li>• Revised requirements for B4 Logos, names, and trademarks.</li> </ul>
<b>Effective date</b>	<p>The changes to sections B1 Signs (including stands and supports), B3 High visibility garments and B4 Logos, names and trademarks will become effective immediately.</p> <p>Changes to B2 Delineation devices will become effective on <b>1 July 2021</b>. This allows suppliers time to make changes to align to:</p> <ol style="list-style-type: none"> <li>some new tolerances</li> <li>the change to the minimum diameter for a cone bar</li> <li>the increase of retro-reflectivity for devices to Class 400, and</li> <li>the change to the specification for the barrel.</li> </ol> <p>Following this date all cones, cone bars and barrels must comply with CoPTTM Section B2 plus this CoPTTM Notice.</p>
<b>Implications</b>	<p><b>Delineation devices</b></p> <p>There have been revisions to the manufacturer's specifications for delineation devices to harmonise with AS 1906.1:2017</p> <p>Suppliers will have until 1st July 2021 to affect any such changes that may be required by this CoPTTM Notice. Devices compliant to the previous edition of CoPTTM purchased prior to this date 30 June 2021 may remain in use until such time as they are no longer suitable for purpose.</p> <p><b>High visibility garments</b></p> <p>There has been changes to the manufacturer's specifications for high visibility garments.</p>

This has resulted in a fractional lowering of fluorescent orange luminance of delineation devices from 0.25 to 0.20, but as manufacturers will already be complying with this, no changes are required.

Manufacturers should note that garment labels for high visibility garments may refer to either AS 4602.1:2011 or AS/NZS 4602.1:2011 hence avoiding any requirement to change current labels.

Two special purpose garments have been added to the high visibility garments section of CoPTTM. The new design elements for these garments cannot be applied to the design of existing high visibility garments.

**Reminder for all holders**

It is important to keep holders of our documents up to date. Holders can update by copying the relevant sections from the Waka Kotahi website: [www.nzta.govt.nz/copttm](http://www.nzta.govt.nz/copttm)

**Additional copies**

These may be downloaded from Waka Kotahi's website, free of charge or purchased direct from our distributor either via the website, or directly to NZ Print, PO Box 2491, Wellington, 6140.

**Key to changes**

New or amended text

**Highlighted**

Deleted text

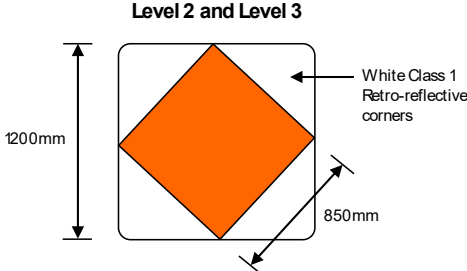
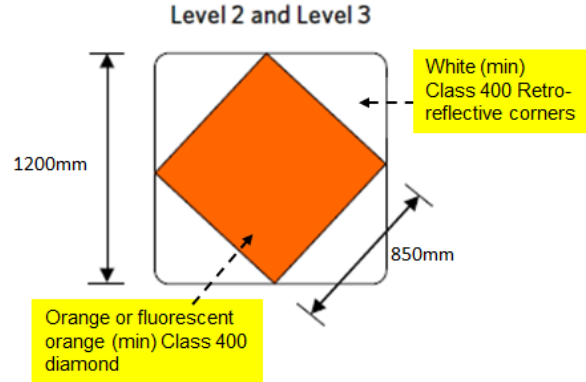
~~Red strike through~~

Comments about the change

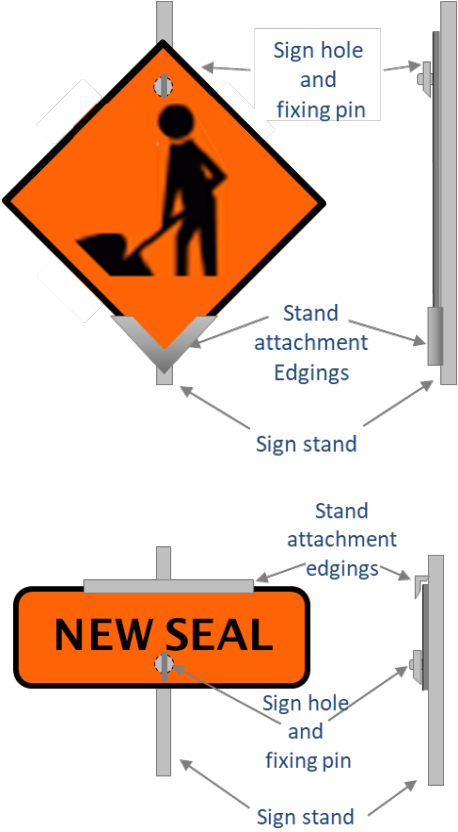
*Italic text*

## Changes to B1 Signs (including stands and supports)

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
<p><b>B1.3 Sign standards</b></p>	<p>All signs must comply with the requirements in New Zealand Standard 5414:1977 <i>Specification for the construction of traffic signs</i> (NZS 5414:1977) and Australian and New Zealand Standard 1906.1:2007 <i>Retro-reflective materials and devices for road traffic control purposes - Retro-reflective sheeting</i> (AS/NZS 1906.1:2007), except where modified by CoPTTM. Where requirements are duplicated, AS/NZS 1906.1:2007 must take precedence over NZS 5414:1977.</p>	<p>All signs must comply with the requirements in <del>New Zealand Standard 5414:1977 Specification for the construction of traffic signs (NZS 5414:1977)</del> the Land Transport Rule Traffic Control Devices 2004 Schedule 1 and Australian <del>and New Zealand</del> Standard 1906.1:2007 2017 <i>Retro-reflective materials and devices for road traffic control purposes – Part 1 Retro-reflective sheeting plus Amendment 1:2020</i> (AS/NZS 1906.1:2007 2017), except where modified by CoPTTM. <del>Where retroreflective requirements are duplicated, AS/NZS 1906.1:2007 2017 must take precedence over NZS 5414:1977.</del></p> <p>Retro-reflective performance must be a minimum of Class 400.</p> <p>Sign substrate must be:</p> <ul style="list-style-type: none"> <li>• aluminium at a minimum of 2.0mm thickness unframed or 1.2mm when fully framed, or</li> <li>• a composite material at a minimum of 3.0mm thickness.</li> </ul>	<p><i>Standard 5414 is out of date.</i></p> <p><i>Replaced with TCD Rule schedule 1 and TCD Manual.</i></p> <p><i>Refers to the revised AS 1906.1 Standard</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
<p><b>B1.3.2 Sign standards on level 2 and 3 roads</b></p>	<p><b>B1.3.2.1 Warning signs</b></p> 	<p><b>B1.3.2.1 Warning signs</b></p> <p>Level 2 and Level 3</p> 	<p><i>Updating previous sheeting Class number from Class 1 to Class 400</i></p>
<p><b>B1.3.3 Non-standard, one-off or special signs.</b> <i>2nd Bullet point</i></p>	<ul style="list-style-type: none"> <li>Where permanent warning sign legends/symbols are adopted for TTM purposes at worksites, the sign background must be specified as reflective orange rather than the retro-reflective yellow.</li> </ul>	<ul style="list-style-type: none"> <li>Where permanent warning sign legends/symbols are adopted for TTM purposes at worksites, the sign background must be specified as <del>reflective</del> retro-reflective orange or retro-reflective fluorescent orange rather than the retro-reflective yellow.</li> </ul>	<p><i>Technical amendment in line with current practice.</i></p>
<p><b>B1.3.3 Non-standard, one-off or special signs.</b> <b>Below bullet points</b></p>	<p>If a contractor considers the range of signs inadequate and a sign with a different legend is required, a request must be made to:</p> <p>Senior Traffic and Safety Engineer (CoPTTM) NZTA National Office Private Bag 6995 Wellington 6141</p>	<p>If a contractor considers the range of signs inadequate and a sign with a different legend is required, a request must be made to:</p> <p><del>Senior Traffic and Safety Engineer (CoPTTM) NZTA National Office Private Bag 6995 Wellington 6141</del></p>	<p><i>Update required for referenced name.</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
	Email: <a href="mailto:stuart.fraser@nzta.govt.nz">stuart.fraser@nzta.govt.nz</a>	<p><del>Email: <a href="mailto:stuart.fraser@nzta.govt.nz">stuart.fraser@nzta.govt.nz</a></del></p> <p><a href="#">Traffic Control Devices Steering Group</a></p> <p><a href="mailto:copttm.consult@nzta.govt.nz">Email: <a href="mailto:copttm.consult@nzta.govt.nz">copttm.consult@nzta.govt.nz</a></a></p>	
<b>B1.3.4 Sign stands and supports</b>	<p>Sign stands and/or supports must be designed to ensure they:</p> <ul style="list-style-type: none"> <li>• will not cause significant damage to a vehicle if struck by one</li> <li>• are stable under all reasonably expected weather conditions and air turbulence from passing traffic, and</li> <li>• will not present a hazard to vehicles, including bicycles, after being knocked or falling over, ie the sign's support and stand must lie relatively flat with no part more than 150mm above the ground surface.</li> </ul>	<p>Sign stands and/or supports <b>systems must be accepted by Waka Kotahi and</b> be designed to ensure they:</p> <ul style="list-style-type: none"> <li>• will not cause significant damage to a vehicle if struck by one</li> <li>• are stable under all reasonably expected weather conditions and air turbulence from passing traffic, and</li> <li>• will not present a hazard to vehicles, including bicycles, after being knocked or falling over, ie the sign's support and stand must lie relatively flat with no part more than 150mm above the ground surface</li> <li>• <b>are designed to hold the displayed sign firmly onto the stand or support in a manner that does not interfere with the sign's message or mask any section of the sign greater than 25mm from the sign's edge.</b></li> </ul>	<p><i>Amendment to ensure that sign attachment systems do not encroach into a sign or risk sign clarity and readability.</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
	<p>New figures showing sign attachment methods</p>		

## Changes to B2 Delineation devices

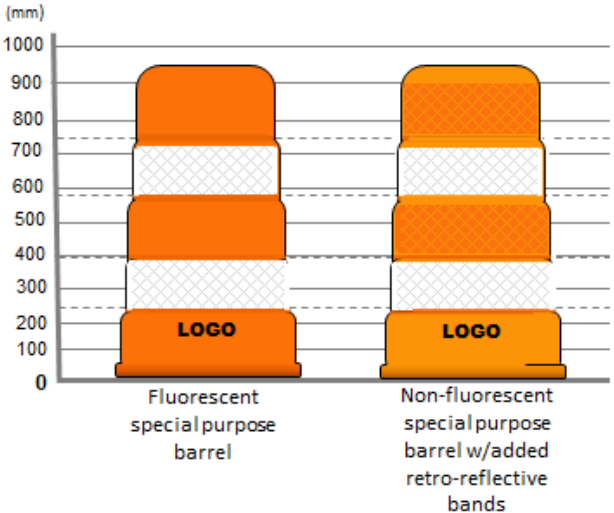
Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
<b>B2.1 General</b>	This revised compliance requirement will come into effect upon publication.	<del>This revised compliance requirement will come into effect upon publication.</del>	<i>Reference to effective date no longer required.</i>
<b>B2.1.2 Use Effective date</b>	<b>B2.1.2 Use</b> Devices compliant to the previous edition of CoPTTM purchased prior to this date may remain in use until such time as they are no longer suitable for purpose.	<b>B2.1.2 Use Effective date</b> Suppliers will have until <b>1st July 2021</b> to affect any such changes that may be required by this CoPTTM Notice. Devices compliant to the previous edition of CoPTTM purchased prior to <del>this date</del> <b>30 June 2021</b> may remain in use until such time as they are no longer suitable for purpose.	<i>Allows use of existing equipment until it is no longer suitable for purpose.</i>
<b>B2.2 Colour</b>	All delineation devices (eg cones, tubular delineators and barrels) must be fluorescent orange with:  a. chromaticity coordinates in accordance with table 2.5 of AS/NZS 1906.1:2007,  b. minimum luminance factor in accordance with table 2.8 of AS/NZS 1906.1:2007.  In addition, the internal colour and the underside of the base of cones, tubular delineators and barrels must be either white or orange to ensure the device remains visible if knocked over. Orange must be compliant to a. above but need not be fluorescent per b. above.	All delineation devices (eg cones, tubular delineators and barrels) must be fluorescent orange with:  a. chromaticity coordinates in accordance with table <del>2.5 of AS/NZS 1906.1:2007</del> , <b>2.6 of AS 1906.1:2017</b> ,  b. minimum luminance factor in accordance with table <del>2.8 of AS/NZS 1906.1:2007</del> <b>2.9 of AS 1906.1:2017</b> .  In addition, the internal colour, and the underside of the base of cones, tubular delineators and barrels must be either <b>a reasonably distinctive</b> white or orange to ensure the device remains visible if knocked over. <b>Black is not permitted</b> . Orange must be compliant to a. above but need not be fluorescent per b. above; <b>white can be</b>	<i>Refers to the revised AS 1906.1 Standard and harmonises Table numbers with the 2017 Standard.  Only change is the fractional <u>reduction</u> to the minimum luminance values for fluorescent orange material from 0.25 to 0.20.  Using a comparison of white to a commercial paint chart avoids the need</i>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
		adjudged compared to a commercial paint chart that depicts white.	<i>to photometrically test for white.</i>
<b>B2.2 Colour</b> (1st paragraph below colour co-ordinates table)	For continued production to remain compliant and in order to avoid the need to test each batch for colour and luminance compliance, a certificate of compliance for the device may remain valid for a maximum of 36 months. During this time manufacturers are expected to take all practicable steps to ensure that colour and luminance remain within specification. A new certificate of compliance must be completed within 36 months.	For continued production to remain compliant and in order to avoid the need to test each batch for colour and luminance compliance, a certificate of compliance for the device may remain valid for a maximum of 36 months. During this time manufacturers are expected to take all practicable steps to ensure that colour and luminance remain within specification. A new <del>certificate of compliance must be completed</del> cone delineator (or other device) with updated TTMC XX/YY must be submitted for colour and luminance re-testing within 36 months in order to maintain the device's certificate of compliance.	<i>Amended to confirm that re-testing at “36 months” is only for colour and luminance and that it is a test that the test laboratory will complete by testing the new cone received.</i> <i>(for Retro-reflective see Clause 2.3).</i>
<b>B2.3 Retro-reflectivity</b>	Delineation devices must have white or silver retro-reflective bands that: <ul style="list-style-type: none"> <li>• Meet a minimum of the photometric performance requirements for Class 1 material in table 2.2 of AS/NZS 1906.1:2007,</li> <li>• Conform to the band width and positioning on the device as noted below, and</li> <li>• Be affixed securely to the device with an adhesive that is appropriate for use with such material.</li> </ul> The certificate of compliance for retro-reflective material must be no older than 36 months.	Delineation devices must have white or silver retro-reflective bands that: <ul style="list-style-type: none"> <li>• Meet a minimum of the photometric performance requirements for <del>Class 1</del> <b>Class 300</b> material in table <del>2.2 of AS/NZS 1906.1:2007</del> <b>2.4 of AS 1906.1:2017</b>,</li> <li>• Conform to the band width and positioning on the device as noted below, and</li> <li>• Be affixed securely to the device with an adhesive that is appropriate for use with such material.</li> </ul> <del>The</del> <b>A test</b> certificate of compliance for retro-reflective material must <b>confirm retro-reflective performance is a minimum of Class 300 AS</b>	<i>Refers to the revised AS 1906.1 Standard and harmonises Table numbers with the 2017 Standard.</i> <i>Unlike colour and luminance, the cone (or other device) submitted may not require a new test for retro-reflective performance if a test certificate confirming compliance is included with the submitted cone. The certificate</i>

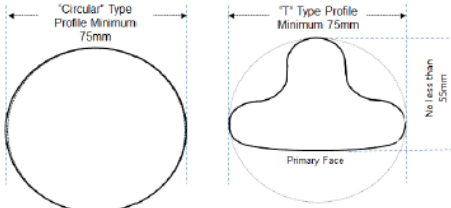
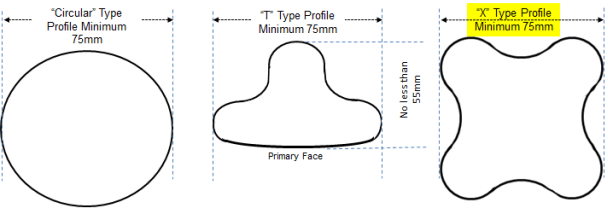


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		1906.1:2017 at each <del>be no older than</del> 36 months in order to maintain the device's certificate of compliance.	<i>may be older than 36 months, but it must still be validated by sighting a Test Summary Certificate.</i>
<b>B2.4 Dimensions</b> (2nd paragraph)	<p>On all levels of roads the cones, tubular delineators and barrels used for delineation purposes must have a minimum height of 900mm and an unballasted weight not exceeding 7kg.</p> <p>A 450mm high cone may be used to delineate and protect wet road markings but will not be compliant for any other use.</p>	<p>On all levels of roads, the cones, tubular delineators and barrels used for delineation purposes must have a minimum height of 900mm (maximum 920mm) with an un-ballasted weight not exceeding 7kg.</p> <p>A 450mm high cone with a minimum height of 450mm (maximum 460mm) may be used to delineate and protect wet road markings but will not be compliant for any other use.</p> <p>A special purpose barrel designed to be used to create greater awareness of critical work zone areas, such as places where vehicles must not enter or to separate traffic from unformed areas of potential danger. This barrel must have a minimum height of 925mm, a maximum height of 960mm (excluding base and handle) and an un-ballasted weight not exceeding 10kgs. The special purpose barrel must stand alone in their own grouping and not be intermixed with traffic guidance cones, tubular delineators or delineation barrels.</p> <p>The special purpose barrel is for purposes other than general traffic guidance delineation and should comply with B2.2 Colour. If not a compliant fluorescent orange it must include two additional fluorescent orange retro-reflective bands as noted in the Figure below.</p>	<p><i>Introduces a tolerance to these measurements.</i></p> <p><i>Introduces a special purpose barrel that will be used more to form a gateway or as a deterrent, but not for use with general delineation.</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment																													
<b>B2.4 Dimensions</b>	<table border="1" data-bbox="698 277 1352 603"> <thead> <tr> <th>Size (mm)</th> <th>Use</th> <th>Number of bands</th> <th>Band width (mm)</th> <th>Height of bottom edge of bands from ground (mm)</th> </tr> </thead> <tbody> <tr> <td>900</td> <td>All roads</td> <td>2</td> <td>At least 150 No wider than 165</td> <td>650±5 Upper band</td> </tr> <tr> <td></td> <td></td> <td></td> <td>At least 100 No wider than 110</td> <td>400±5 Lower band</td> </tr> <tr> <td>450</td> <td>To protect freshly painted road markings</td> <td>1</td> <td>100</td> <td>250±5</td> </tr> </tbody> </table>	Size (mm)	Use	Number of bands	Band width (mm)	Height of bottom edge of bands from ground (mm)	900	All roads	2	At least 150 No wider than 165	650±5 Upper band				At least 100 No wider than 110	400±5 Lower band	450	To protect freshly painted road markings	1	100	250±5		<p><i>Table has been replaced with a new table that includes the new deterrent type barrels and the tolerances for measurements.</i></p>									
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<b>B2.4 Dimensions</b> <i>(continued)</i>	New figure placed immediately below current figure		<i>Additional figure to explain colouring of special purpose barrel</i>																		
<b>B2.4.1.1 Cone bars</b>	<table border="1" data-bbox="353 826 1014 1442"> <thead> <tr> <th>Materials</th> <th>Rigid plastic</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>Under 7kg.</td> </tr> <tr> <td>Length</td> <td>Minimum length 1.0m – Extends up to 2.2m.</td> </tr> <tr> <td>Diameter</td> <td>Minimum 35mm to 100mm.</td> </tr> <tr> <td>Frangibility</td> <td>Non-splintering frangible type material.  Will not present a hazard to vehicles after falling from the cone support.</td> </tr> </tbody> </table>	Materials	Rigid plastic	Weight	Under 7kg.	Length	Minimum length 1.0m – Extends up to 2.2m.	Diameter	Minimum 35mm to 100mm.	Frangibility	Non-splintering frangible type material.  Will not present a hazard to vehicles after falling from the cone support.	<table border="1" data-bbox="1041 826 1697 1262"> <thead> <tr> <th>Materials</th> <th>Rigid plastic</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>Under 7kg.</td> </tr> <tr> <td>Length</td> <td>Minimum length 1.0m – Extends up to <b>max 2.2m overall.</b></td> </tr> <tr> <td>Diameter</td> <td>Minimum <del>35mm</del> <b>32.5mm to maximum 100mm for either of the two expanding sections.</b></td> </tr> </tbody> </table>	Materials	Rigid plastic	Weight	Under 7kg.	Length	Minimum length 1.0m – Extends up to <b>max 2.2m overall.</b>	Diameter	Minimum <del>35mm</del> <b>32.5mm to maximum 100mm for either of the two expanding sections.</b>	<i>Amended to reduce confusion re minimum diameter and overall length.</i>
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Frangibility	Non-splintering frangible type material.  Will not present a hazard to vehicles after falling from the cone support.								
Colour/retro-reflectivity	Alternating black and orange or black and yellow stripes. Minimum length 150mm. Maximum length 300mm.  Orange or yellow must be <b>Class 2 Class 100</b> Engineer Grade retro-reflective sheeting complying with <del>AS/NZS 1906.1:2007 Table 2.4</del> <b>AS 1906.1:2017 Table 2.5</b>								
<b>B2.4.2 Barrels</b>	<p>All barrels must have:</p> <ul style="list-style-type: none"> <li>• a minimum base dimension of 600mm x 600mm</li> <li>• rectangular or slightly chamfered corners</li> <li>• a stable base design that will accommodate sandbags as ballast</li> <li>• be made of a flexible polymer or similar material</li> <li>• have the standard pattern of retro-reflective tape</li> </ul>	<p>All barrels must have:</p> <ul style="list-style-type: none"> <li>• a minimum base dimension of 600mm x 600mm</li> <li>• <del>rectangular or slightly chamfered corners</del></li> <li>• a stable base design that will accommodate sandbags as ballast</li> <li>• be made of a flexible polymer or similar material</li> <li>• have the <del>standard</del> <b>specified</b> pattern of retro-reflective tape.</li> </ul>	<p><i>Amended to accommodate the special purpose barrel</i></p>						

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
<p><b>B2.4.3 Tubular delineators</b></p>	<p>Tubular delineators may be either circular, or a “T” type profile with a fixed or weighted base. They must:</p> <ul style="list-style-type: none"> <li>• if circular, be no less than 75mm when viewed from any direction</li> <li>• if a “T” type profile, the primary approach face must be no less than 75mm in width and the reinforcing spine measurement no less than 55mm from primary face</li> <li>• have the standard pattern of retro-reflective tape</li> <li>• be capable of returning to their original shape after impact (unless dislodged from its base)</li> <li>• must not use a method of fixing that will damage the pavement surfacing.</li> </ul>	<p>Tubular delineators may be either circular, or a ‘T’ or ‘X’ type profile with a fixed or weighted base. They must:</p> <ul style="list-style-type: none"> <li>• if circular or an ‘X’ profile, be no less than 75mm when viewed from any direction</li> <li>• if a “T” type profile, the primary approach face must be no less than 75mm in width and the reinforcing spine measurement no less than 55mm from primary face</li> <li>• have the standard pattern of retro-reflective tape</li> <li>• be capable of returning to their original shape after impact (unless dislodged from its base)</li> <li>• must not use a method of fixing that will damage the pavement surfacing.</li> </ul>	<p><i>Recognises a previously accepted ‘X’ profile shape</i></p>
			<p><i>Adds ‘X’ profile</i></p>

## Changes to B3 High visibility garments


Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
<b>B3.1 Material compliance</b>	<b>Note:</b> Clause 1.5 previously included in the AS/NZS 1906.4:1997 Standard has been deleted in the AS/NZS 1906.4:2010 Revision. This eliminates automatic cross compliance from EN 471 Standards. Materials used in the manufacture of all garments must now be tested and approved to the AS/NZS 1906.4:2010.	<del><b>Note:</b> Clause 1.5 previously included in the AS/NZS 1906.4:1997 Standard has been deleted in the AS/NZS 1906.4:2010 Revision. This eliminates automatic cross compliance from EN 471 Standards. Materials used in the manufacture of all garments must now be tested and approved to the AS/NZS 1906.4:2010.</del>	<i>No longer relevant</i>
<b>B3.1.2 Retro-reflectivity</b>	New 3 <sup>rd</sup> Paragraph	The application of red and white/silver checkered retro-reflective material is strictly limited to garments designed for traffic incident response personnel.	<i>New paragraph to accommodate Traffic Incident Management (TIM) garment</i>
<b>B3.3 Garment compliance</b>	<p>Garment compliance is based on the Australian and New Zealand Standard AS/NZS 4602.1:2011 <i>High visibility safety garments Part 1: Garments for high risk applications</i> including Amendment 1:2016 and the additional subsections and Figures that follow herein. All background high visibility material must comply with the wet test, as specified in subsection <a href="#">B3.1.1 Colour</a>.</p> <p>In order to confirm compliance with Section B3 new compliance letters <b>'TTMC-W17'</b> of a practicable size must be included on the garment label.</p> <p><b>Note:</b></p> <p>i. Refer also to subsection <a href="#">B3.4.7 Exemption for extra small size garments</a></p>	<p>Garment compliance is based on the Australian <del>and New Zealand</del> Standard <b>AS/NZS AS</b> 4602.1:2011 <i>High visibility safety garments Part 1: Garments for high risk applications</i> including Amendment 1:2016, including Amendment 1:2016 <b>and Amendment 2:2020</b> and the additional subsections and Figures that follow herein. All background high visibility material must comply with the wet test, as specified in subsection <a href="#">B3.1.1 Colour</a>.</p> <p>In order to confirm compliance with Section B3 new compliance letters <b>'TTMC-W17'</b> of a practicable size must be included on the garment label.</p> <p><b>Note:</b></p> <p>i. Garment label may refer to either AS or AS/NZS 4602.1:2011.</p>	<p><i>Refers to the AS 4602.1 Standard</i></p> <p><i>Manufacturers should note that garment labels for high visibility clothing may refer to either AS 4602.1:2011 or AS/NZS 4602.1:2011 hence avoiding any requirement to change current labels.</i></p> <p><i>This now mentions existence of Amendment 2 and that as noted in AS</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
	<p>ii. Hereafter, mention of the AS/NZS 4602.1 Standard or Amendments refers to both the Standard plus amendments.</p>	<p>ii. Refer also to subsection <a href="#">B3.4.7 Exemption for extra small size garments</a></p> <p>iii. Hereafter, mention of the AS/NZS 4602.1 Standard or Amendments refers to both the Standard plus amendments.</p>	<p><i>4602.1:2011 Amdt 2 Clause 10.2</i></p>
<p><b>B3.4 Garment design</b></p>	<p>The publication of Amendment 1:2016 to the Australian and New Zealand Standard AS/NZS 4602.1:2011 has required the amendment of the CoPTTM section B3 in order to maintain harmony with the 4602.1:2011 Standard.</p> <p>In order to provide manufacturers and suppliers sufficient time to incorporate design changes, effective immediately and for a period until February 28<sup>th</sup> 2019, garments complying with CoPTTM Edition 4 February 2017 will be adjudged equally compliant.</p> <p>From 1st March 2019, all garments manufactured must comply with the TTMC-W17 specifications.</p>	<p>The publication of Amendment 1:2016 and Amendment 2:2020 to the Australian <del>and New Zealand</del> Standard AS/<del>NZS</del> 4602.1:2011 has required the amendment of the CoPTTM section B3 in order to maintain harmony with the 4602.1:2011 Standard.</p> <p><del>In order to provide manufacturers and suppliers sufficient time to incorporate design changes, effective immediately and for a period until February 28<sup>th</sup> 2019, garments complying with CoPTTM Edition 4 February 2017 will be adjudged equally compliant.</del></p> <p><del>From 1st March 2019, all garments manufactured must comply with the TTMC-W17 specifications.</del></p>	<p><i>Refers to the AS 4602.1 Standard</i></p> <p><i>Historical effective dates no longer required</i></p>
	<p><b>B3.4.2 STMS and MTC Garments</b></p> <p>Two special purpose garments differ from the standard compliant orange coloured high visibility garment range specified in section <a href="#">B3.4 Garment design</a>.</p> <p>Although these garment designs must comply with the standard compliant orange garment design the</p>	<p><b>B3.4.2 STMS, <del>and</del> MTC, <b>SP and TIM Garments</b></b></p> <p><del>Two</del> <b>Four</b> special purpose garments differ from the standard compliant orange coloured high visibility garment range specified in section <a href="#">B3.4 Garment design</a>.</p> <p>Although these garment designs must comply with the standard compliant orange garment design the</p>	<p><i>This amendment is required subsequent to introduction of two new specialty garment designs</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
	<p>background material colour must become a compliant fluorescent yellow where specified.</p> <p>Both garments identify the specialised responsibility of the wearer.</p>	<p>background material colour must become a compliant fluorescent yellow where specified.</p> <p><del>Both garments identify</del> Each garment identifies the specialised responsibility of the wearer.</p>	
<p><b>B3.4.2.3 Special purpose garment</b></p>	<p>New clause inserted for new garment design</p>	<p><b>B3.4.2.3 Special purpose garment</b></p> <p>Use of this special purpose long sleeve garment is limited to electrical employees working with or in and around electrical reticulation systems, substations, switchboards and similar locations where the risk of arc flash is a concern.</p> <p>The design, based on the sleeveless vest specified in <a href="#">B3.4.1.1 Sleeveless vest requirements</a> and Figure 1 has the following significant design features:</p> <ul style="list-style-type: none"> <li>• long sleeves have been added</li> <li>• sleeve colour must comply with the orange colour specified for the sleeveless vest in <a href="#">B3.4.1.1 Sleeveless vest requirements</a></li> <li>• each sleeve must have two compliant retro-reflective hoops, one positioned above the elbow and one below the elbow</li> <li>• to lessen the effect of wear discolouration, a non-compliant colour may be added below the retro-reflective hoop positioned at the approximate midpoint between the wrist and the elbow</li> </ul>	<p><i>This new garment is required to be full length at the front for the wearers' special safety reasons</i></p>



Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
		<ul style="list-style-type: none"> <li>the garment length measurement at the front of the garment has been extended by 150mm to equal the length at the back of the garment</li> <li>this added section must be a non-compliant colour, other than orange, matching the non-compliant lower sleeve colour if chosen as noted above.</li> </ul>	
		<p><b>Figure 2C:</b> Special purpose long sleeved vest (100-105cm test size) front and side view.</p>	
<b>B3.4.2.4 Traffic Incident Manager (TIM) garment</b>	Requirements for new Traffic Incident Manager (TIM) garment added.	<p><b>B3.4.2.4 Traffic Incident Manager (TIM) garment</b></p> <p>Use of this special purpose long sleeve garment (and coat) is strictly limited to authorised traffic incident response personnel.</p> <p>The design, based on the sleeveless vest specified in B3.4.2.1 STMS sleeveless vest and Figure 2A has the following significant design features:</p> <ul style="list-style-type: none"> <li>long sleeves have been added. Sleeve colour must comply with the fluorescent yellow colour</li> </ul>	<p><i>New garment design and use of red checkered retro-reflective tape is strictly limited to the TIM garment and traffic incident response personnel</i></p>

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
		<p>specified for the sleeveless vest in <a href="#">B3.4.2.1 STMS sleeveless vest</a></p> <ul style="list-style-type: none"> <li>retro-reflective elements must be compliant red and white/silver checkered material of minimum 50mm width configured as shown in Figure 2D</li> <li>the optional retro-reflective cross configuration on the back of a garment is not permitted for TIM garments</li> <li>each sleeve must have a compliant red and white/silver retro-reflective hoop positioned at the approximate midpoint between the wrist and the elbow</li> <li>the TIM long sleeved garment may be substituted by a long sleeved coat, but must maintain the TIM badging and colour specification</li> </ul> <p><b>Note:</b> No other CoPTTM high visibility garment may use the red and white or red and silver checkered retro-reflective material.</p>	
		 <p><b>Figure 2D:</b> TIM long sleeve garment. (100-105 Test size) Long sleeve coat will adopt a coat compliant design.</p>	
		<p>A retro-reflective white/silver panel measuring 80±5mm wide x 110±10mm deep must be placed</p>	

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment												
		<p>on the upper left front of the garment. This panel must not cover any of the vertical retro-reflective elements on the front of the garment and it will replace the permitted logo area.</p> <p>A retro-reflective white/silver panel measuring 240±10mm wide x 110±10mm deep must be placed on the upper centre back of the garment between the retro-reflective braces. This panel must not cover any of the retro-reflective elements on the back of the garment.</p> <p><b>NOTE:</b> XS size and smaller TIM garment sizes may use a special reduced size panel graded to achieve the design.</p> <p>The legend, TIM and TRAFFIC INCIDENT MANAGER, must be displayed on the back and front left panels in the following manner:</p>													
		<table border="1"> <tr> <td data-bbox="1039 863 1301 935"><b>Border colour</b></td> <td colspan="2" data-bbox="1301 863 1688 935">Red: 5±2mm</td> </tr> <tr> <td data-bbox="1039 935 1301 1007"><b>Print colour</b></td> <td colspan="2" data-bbox="1301 935 1688 1007">Red</td> </tr> <tr> <td data-bbox="1039 1007 1301 1190"><b>TIM font</b></td> <td data-bbox="1301 1007 1469 1190">Helvetica Bold</td> <td data-bbox="1469 1007 1688 1190">           Front: 25±3mm            Back: 50±5mm         </td> </tr> <tr> <td data-bbox="1039 1190 1301 1366"><b>Words</b></td> <td data-bbox="1301 1190 1469 1366">Helvetica</td> <td data-bbox="1469 1190 1688 1366">           Front: 7-10mm            Back: 12-15mm         </td> </tr> </table>	<b>Border colour</b>	Red: 5±2mm		<b>Print colour</b>	Red		<b>TIM font</b>	Helvetica Bold	Front: 25±3mm Back: 50±5mm	<b>Words</b>	Helvetica	Front: 7-10mm Back: 12-15mm	
<b>Border colour</b>	Red: 5±2mm														
<b>Print colour</b>	Red														
<b>TIM font</b>	Helvetica Bold	Front: 25±3mm Back: 50±5mm													
<b>Words</b>	Helvetica	Front: 7-10mm Back: 12-15mm													

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
		<p>As a first responder associating with other emergency services the TIM must display personal ID in a clear pocket measuring a maximum of 95mm x 60mm on the upper right front. This requirement must <b>not</b> be added to other high visibility garments.</p>	

## Changes to Section B4 Logos, names and trademarks

Reference in 4 <sup>th</sup> Edition	Current CoPTTM November 2018	Change in CoPTTM November 2018	Comment
<p><b>B4.1.1 general</b></p>	<p>Logos, company names and other trademarks must not be displayed on the front of TTM signs. The logo, company name or trademarks of the sign's owner may be displayed on the back of signs provided they do not detract from the legibility or reflectivity of the sign.</p> <p>No more than one logo is to be displayed on traffic signs, other traffic management devices and high visibility garments.</p>	<p>Logos, company names and other trademarks <b>screen printed, applied as stickers or engraved into the substrate</b> must not be displayed on <b>or affect</b> the front of TTM signs. <del>The. These</del> logos, company names or trademarks of the sign's owner may be displayed on the back of signs provided they do not detract from the legibility or <b>reflectivity retro-reflectivity</b> of the sign.</p> <p>No more than one <b>screen printed, or sticker logo</b> is to be displayed on <b>the back of</b> traffic signs, other traffic management devices and high visibility garments.</p> <p><b>A logo that is punched through the face of a sign may be added providing it does not encroach on any legend or symbol or damage the retro-reflectivity in the immediate area of the logo.</b></p> <p><b>Only one such logo may be added.</b></p>	<p><i>In order to differentiate between printed logos on the back of signs and the embossed or complete punched logos.</i></p>
<p><b>B4.1.2 Area requirements for signs</b></p>	<p>Any logo displayed on a traffic sign must not exceed:</p> <ul style="list-style-type: none"> <li>• 3000mm<sup>2</sup> (eg 30mm x 100mm) on signs less than 1m<sup>2</sup> or on any other traffic management devices</li> <li>• 10,000mm<sup>2</sup> (eg 100mm x 100mm) on traffic signs larger than 1m<sup>2</sup>.</li> </ul>	<p>Any <b>printed, sticker or engraved</b> logo displayed on a traffic sign must not exceed:</p> <ul style="list-style-type: none"> <li>• 3000mm<sup>2</sup> (eg 30mm x 100mm) on signs less than 1m<sup>2</sup> or on any other traffic management devices</li> <li>• 10,000mm<sup>2</sup> (eg 100mm x 100mm) on traffic signs larger than 1m<sup>2</sup>.</li> </ul> <p><b>Any logo punched through a sign must be no larger in area than 3000mm<sup>2</sup> or 10,000mm<sup>2</sup> on any sign as noted above.</b></p>	<p><i>Added to enable a dimension to be specified for the embossed or punched logo</i></p>