



ROAD SAFETY ENGINEERING TECHNICAL ARTICLE I3C202308

COVERING UP PAVEMENT MARKINGS

As drivers, we have all seen old pavement markings showing through at roadwork sites. Temporary Traffic Management often requires that pavement markings are altered or covered up, so what is the most effective way to do this?

The photograph below shows how a failure to cover up markings can result in a hazardous site. This is not the only hazard at this site, but I will use it to demonstrate how the pavement marking can be addressed.



An obvious solution is to simply cover up the markings with black tape or paint. I've seen workers racing off to Bunnings when I raise this issue – alas, it's not that simple.

Section 6.6 (Pavement Marking) of Austroads Guide to Temporary Traffic Management Part 3 states *“markings must not be covered using black or grey paint as under certain light or wet weather conditions they may appear indistinguishable from white markings”*.

It also states that *“for shorter term worksites, temporary tape/ stickers may be used to cover line marking or other pavement marking (e.g., turning arrows)”*.

I'm not on the payroll for 3M and I don't have a commercial arrangement with them, but they do provide a very good covering tape they call 'Stamark™ Removable Black Line Mask 715'. If there are any other providers out there that provide a good covering tape, feel free to add your details in the reply section of this post.

Regardless of the tape used, covering a marking in the same shape as the marking will result in this showing up in various weather conditions, sometimes better than the required markings.

Whilst it's easy to tape over a pavement arrow with a rectangular box of tape, the same cannot be done for line markings. In these instances, cross sections of tape can be used to make it clear that this is an old marking, as shown in the example below. The top picture represents the black tape in regular conditions whilst the bottom picture shows how this would look if sun glare and or wet conditions make it appear white again.



Now that we know how to address the issue of old markings showing through, how do we ensure that the tape stays in place? Like just about everything else in life, we need to read the manufacturers' instructions and follow them to the letter. 3M indicates that if you do, their tape will last for up to 12 months. This is how they say their product should be installed:

"Ideally you want to clean any debris from the road to have a clean surface to adhere to. No need for anything dramatic, a truck blowing pressurised air (or a leaf blower for smaller sections) will do just fine.

You can then either roll out the tape in a single line and cover the existing markings (for long lines) or cut-out to shape and apply over other types of markings (e.g., arrows etc.)

The next step is one of the most important ones for proper adhesion for the duration of the project and I always try to emphasise it to the application crews – Tamping! Once you apply the Stamark tape on the road you need to apply pressure on (tamp) to activate the adhesive. You can either use a foldable weight cart that we can provide (minimum of 90kg) or use the wheels of a vehicle to drive over (typically best for long lines). The tape needs to be tamped at least 3 times each way (6 times total).

Once you finish with the tamping you can open the road to traffic immediately (or move on to the next job on the site).

At the end of the project, when the crew are ready reopen the road with the original markings, all they have to do is pull the Stamark tape up (90-120 degrees), at a relatively slow rate (walking). The tape has a built-in net to assist with coming off in single or large pieces for quick removal with minimal to no bits left behind. The tape at this stage cannot be recycled in case you are wondering, so once pulled up it will need to be disposed of at the land fill.”

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