



Bonneagar Iompair Éireann  
Transport Infrastructure Ireland

## TII Publications



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# Notes for Guidance on the Method of Measurement for Road Works Series MMNG 400 - Road Restraints Systems (Vehicle and Pedestrian)

**CC-GMP-00400**

March 2013

## About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

## About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical). This system replaces the NRA Design Manual for Roads and Bridges (NRA DMRB) and the NRA Manual of Contract Documents for Road Works (NRA MCDRW).

## Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference. For migration of documents from the NRA and RPA to the new system, each current document was assigned with new outer front and rear covers. Apart from the covers, and inside cover pages, the documents contain the same information as previously within the NRA or RPA systems, including historical references such as those contained within NRA DMRB and NRA MCDRW.

## Document Attributes

<b>TII Publication Title</b>	<i>Notes for Guidance on the Method of Measurement for Road Works Series MMNG 400 - Road Restraints Systems (Vehicle and Pedestrian)</i>
<b>TII Publication Number</b>	<i>CC-GMP-00400</i>

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<b>Historical Reference</b>	<i>Series MMNG 400</i>

## NRA DMRB and MCDRW References

For all documents that existed within the NRA DMRB or the NRA MCDRW prior to the launch of TII Publications, the NRA document reference used previously is listed above under 'historical reference'. The TII Publication Number also shown above now supersedes this historical reference. All historical references within this document are deemed to be replaced by the TII Publication Number. For the equivalent TII Publication Number for all other historical references contained within this document, please refer to the TII Publications website.

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# **SERIES 400: ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIANS)**

## **1 Safety Barriers**

The MMRW provides for three categories of curvature of safety barriers for payment purposes. Curves which are made up of individual straight lengths of beams should not be considered to be small lengths of straight fence. They should be measured as curved fences within Group II features in MMRW. The radius is to be considered to be the radius equal to that of the arc which passes through the posts.

## **2 Vehicle Parapets**

The MMRW provides for two categories of curvature of vehicle parapets for payment purposes. Curves which are made up from individual straight lengths of parapet should not be considered to be small lengths of straight parapet.

## **3 Pedestrian Guardrails, Pedestrian Guardrails and Handrails**

Curves which are made up from individual straight lengths should not be considered as curved elements but as straight guardrails or handrails.

Where the rails are actually curved they should be measured as curved guardrails or handrails as described by the specific radius.

## **4 Materials for Standard Parapets**

The materials for use in standard parapets should not normally have been designated by the Employer.



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