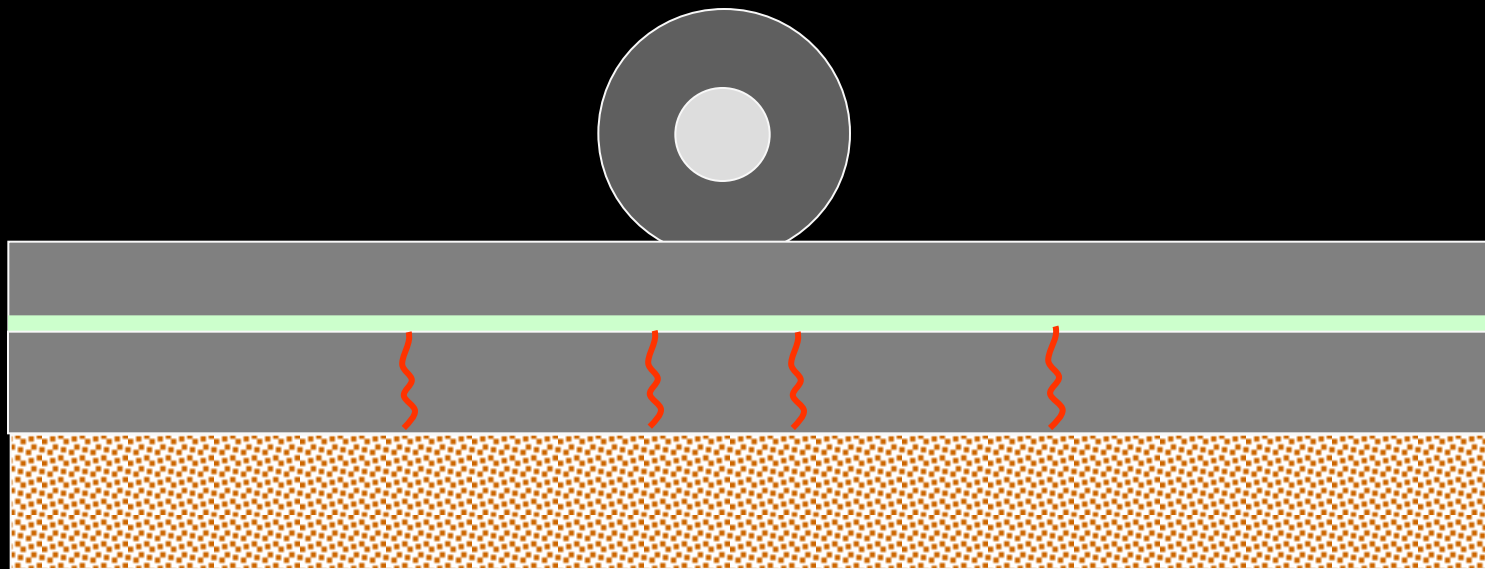


REVISION OF TG 3

TG 3 – Geosynthetics (GS) in Road Pavements

Philip Joubert - WG Coordinator

RPF - 15 November 2017

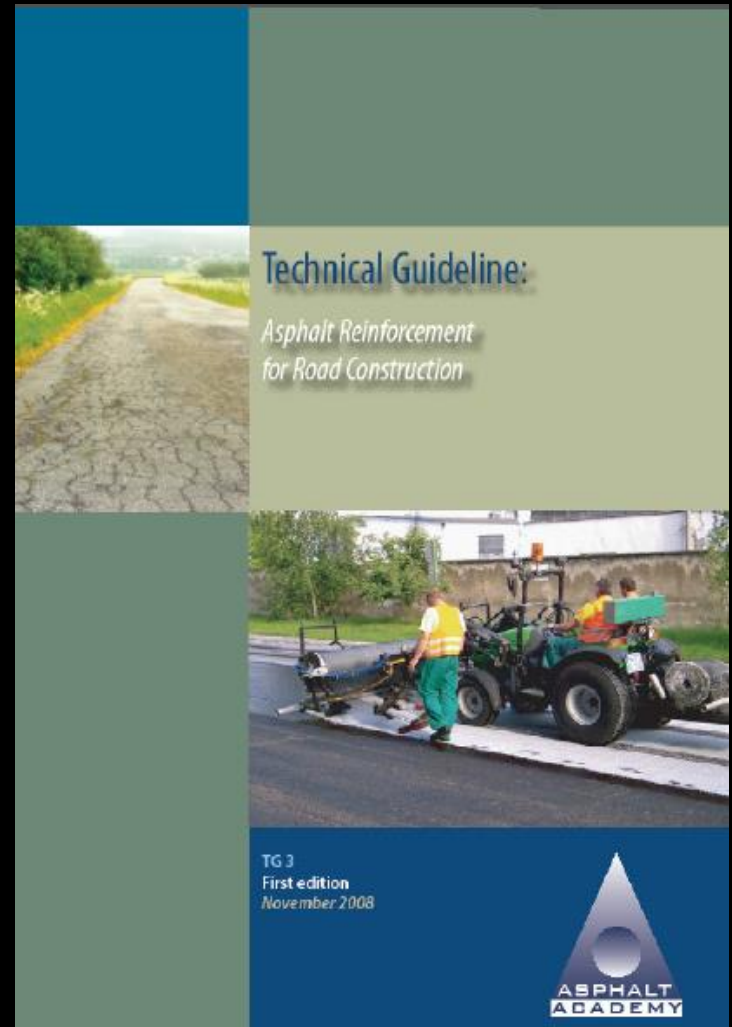


CONTENTS

- ❖ Quick background and Actions
- ❖ Purpose
- ❖ Scope & Structure
- ❖ General Comments
- ❖ Request

BACKGROUND

- ❖ TG 3 published by Asphalt Academy in 2008
- ❖ Need for update identified (Dennis Rossmann and Bit Spec)
- ❖ Expansion of scope?
- ❖ TG 3 WG formed – industry (Old and new members)



ACTIONS

- ❖ September – Workshop to prepare ToR
- ❖ October – Kick-off WP meetings
- ❖ Dec/ Jan – 2018 Planning meeting

PURPOSE (1)

- Provide a synthesis of:
 - practical, state-of-the-art approaches to the use of GS,
 - Must be based on best practice knowledge and experience, both international and regional.

PURPOSE (2)

- To contribute towards one or more:
 - Reduction in cost of construction or rehabilitation
 - Increased the effectiveness of the pavement structure design – focus on sustainability
 - Reduction in pavement thickness
 - Improvement in performance of materials and pavement structure

PURPOSE (3)

- Guide must:
 - Promote appropriate use of GS products
 - Assist in providing access to knowledge for designer/contractor
 - Access to lessons learnt and case studies
 - Be readable, simple and of limited thickness
- Repository of latest developments in TG3 field

SCOPE

Application to different components of pavement:

- Bound and unbound layerworks, Subgrade:
 - Asphalt Reinforcing and Paving fabrics
 - Geogrids
 - High Strength Reinforcing Geotextiles
 - Steel mesh
 - Geocells

STRUCTURE

- **Part A: Introduction**
- 1: Background
- 2: How to use guideline (flow diagrams, etc.)
- 3: Technical considerations
- 4: Life cycle (environmental) considerations

STRUCTURE

- **Part B: Bound (Asphalt) Layers**
- 1: GS Types and Selection
- 2: Design Approach
- 3: Specifications
- 4: Practical Construction Issues
- 5: Quality Control

- **Part C: Unbound (Granular) Layers**

STRUCTURE

- **Part D: Implementation**
- 1: Example projects & lessons learnt
(Generic Examples)
- 2: Bibliography

WORK PACKAGES

1. Introduction
2. Design
3. Product Type, Selection, & Specifications
4. Construction and Quality Control

GENERAL COMMENTS

- ❖ Move towards use of international definitions and ISO standards (SABS/TC 081/SC 05)
 - Part 5 “Stabilisation” and Part 7 “Reinforcement”
- ❖ Explore involvement of Agrément SA & CSIR?
- ❖ Adequate progress in past decade to address design methods in more detail
- ❖ Paved (Asphalt and Structural layers) and Unpaved applications to be addressed

GENERAL COMMENTS

- ❖ Representative case studies to validate performance / design methods
- ❖ Identification/ construction of dedicated long-term performance sections?
- ❖ Possible special seminar in 2018, with internationally recognised guest speakers. Held a day before an industry event, such as RPF
- ❖ Students participate and potentially use work towards undergraduate or masters degrees

REQUEST

1. Want to join us, or make contributions or suggestions?
2. Projects using GS in pavement layers?

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