

HAPAS

Callewaert Intellectual Property Inc.

t/a Trexiana Wholesale & Distribution Ltd.

12543 24th Ave
Surrey, BC
V4A 2E5, Canada

Tel: 001 604 357 5273

e-mail: info@flexmse.com

website: www.flexmse.com



HAPAS Certificate
22/H6246
Product Sheet 1

FLEX MSE SYSTEM

FLEX MSE VEGETATED WALL SYSTEM

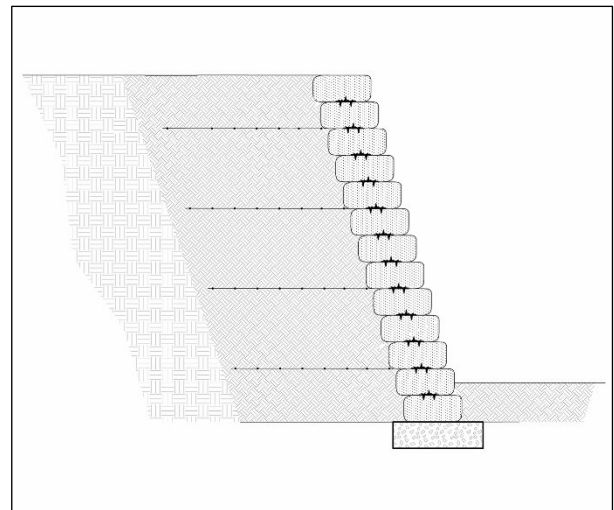
This HAPAS Certificate Product Sheet⁽¹⁾ is issued by the British Board of Agrément (BBA), supported by National Highways (acting on behalf of the Overseeing Organisations of the Department for Transport; Transport Scotland; the Welsh Government and the Department for Infrastructure, Northern Ireland), the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), the Local Government Technical Advisers Group and industry bodies. HAPAS Certificates are normally each subject to a review every three years.

(1) Hereinafter referred to as 'Certificate'.

This Certificate relates to the FLEX MSE Vegetated Wall System, for use in soil reinforcement, reinforced slopes and embankments with slope angles up to 70°. The system comprises non-woven geotextile bagwork and connection plates, and is used in conjunction with BBA-certified geogrids.

CERTIFICATION INCLUDES:

- factors relating to compliance with HAPAS requirements
- factors relating to compliance with Regulations where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Design properties — the method of connection between Flex MSE Bag and the geogrids, via the Flex MSE Connection Plate, has been assessed and long term connection strength values determined. The interface shear capacity between adjacent bagworks between layers of reinforcement has also been assessed (see section 6).

Durability — when used in accordance with the requirements of this Certificate, the system may be considered to have a life expectancy in excess of 120 years (see section 8).

The BBA has awarded this Certificate to the company named above for the system described herein. This system has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of First issue: 4 August 2022

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

*The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk
Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.*

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

1st Floor Building 3
Hatters Lane, Croxley Park,
Watford, Herts WD18 9YG

©2022

Page 1 of 8

tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk

HAPAS

Callewaert Intellectual Property Inc.

t/a Trexiana Wholesale & Distribution Ltd.

12543 24th Ave
Surrey, BC
V4A 2E5, Canada

Tel: 001 604 357 5273

e-mail: info@flexmse.com

website: www.flexmse.com



HAPAS Certificate

22/H6246

Product Sheet 99

SUPPLEMENT TO FLEX MSE VEGETATED WALL SYSTEM

This HAPAS Certificate Product Sheet⁽¹⁾ is issued by the British Board of Agrément (BBA), supported by National Highways (NH) (acting on behalf of the Overseeing Organisations of the Department for Transport; Transport Scotland; the Welsh Assembly Government and the Department for Infrastructure, Northern Ireland), the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), the Local Government Technical Advisers Group and industry bodies. HAPAS Certificates are normally each subject to a review every three years.
(1) Hereinafter referred to as 'Certificate'.

The below geogrids are accepted for use with the Flex MSE Vegetated Wall System

Name	Supplier	BBA Certificate
Xgrid	Tema Med	16/H253
Techgrid Geogrids	TechFab India Industries Ltd	11/4882
Tensar Geogrids	Tensar International Limited	13/H202
Stratagrid Geogrids	Geosynthetics Ltd	20/H302
Secugrid Geogrids	NAUE GmbH & Co KG	14/H218
Edilgrid Geogrids	Edilfloor S.P.A	16/5381
Stratagrid Geogrids	Strata Geosystems (india) Pvt	20/H301
Miragrid GX Geogrids	Tencate Geosynthetics	15/H231
Fortrac T and R-T Geogrids	HUESKER Synthetic GmbH	13/H197

The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of First issue: 4 August 2022

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

1st Floor Building 3
Hatters Lane, Croxley Park,
Watford, Herts WD18 9YG

©2022

tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk