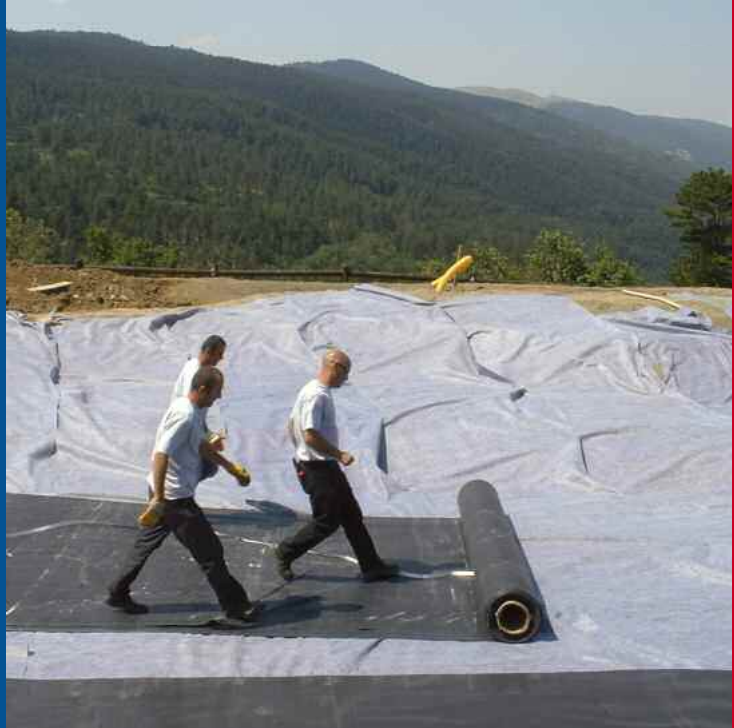


Firestone PondGard
EPDM Geomembrane
1.02mm

Firestone



GORDON LOW

Firestone Installation

The following information is intended as an overview of processes and techniques used in the design, installation and commissioning of ponds, lakes and waterscapes, using Firestone PondGard EPDM. It includes simplified details on various types of edge and bank construction and a step-by-step guide to splicing together sheets of material.

For full technical instructions please ask for the "Firestone Installation Guidelines" or "Firestone Technical Pocket Guide".

If you are interested in becoming a Qualified Firestone Installer we can provide classroom training courses and on site assistance from Firestone Technical Representatives. Please ask for further details



Firestone standard rolls are available from stock – we hold a minimum level of 75,000m² in our warehouse and can arrange delivery to your site on the day you need it.

Firestone PondGard

EPDM Geomembrane 1.02mm

Firestone PondGard is an EPDM Geomembrane that is specifically designed for garden pond and lake applications. Its formulation and production process makes it perfectly compatible with aquatic life, in accordance with test reports published by the Water Research Centre in the UK. Firestone's EPDM manufacturing facilities have received ISO 9001 certification for their total quality management principles and ISO 14001 certification for their environmental management systems. PondGard carries a 20 year guarantee.

See pages 6 and 7 for details of available roll sizes, accessories, tapes and adhesives.



The process in pictures...

These images of an installation in Turkey illustrate the main stages of the installation process. (Images courtesy of Firestone Building Products)



Groundworks anchor trench



Laying geotextile underlay



Tacking geotextile underlay



Rolling out PondGard



Laying PondGard into trench



Positioning PondGard sheets



Tacking the splice



Priming the splice



Installing splice tape



Rolling splice tape



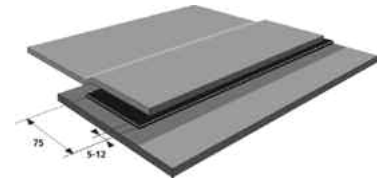
Completing splice detail



Gradually filling with water

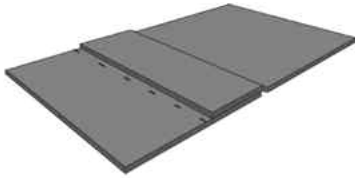
Splicing made simple

Where a number of Firestone PondGard sheets need to be joined on site, these step-by-step instructions will help you produce perfect, permanent seams. Ask for the Firestone Technical Pocket Guide for full details on these and other easy-to-follow installation techniques.

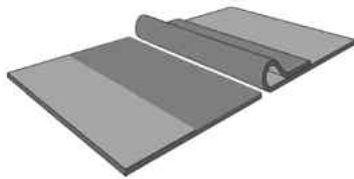


Dimensions of the splice

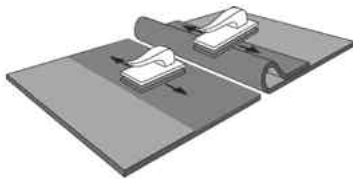
1. Position and mark the sheets



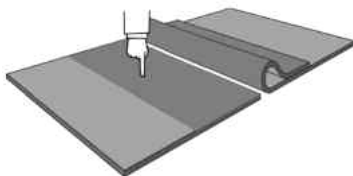
2. Fold back the lap edge and fix with QuickPrime Plus



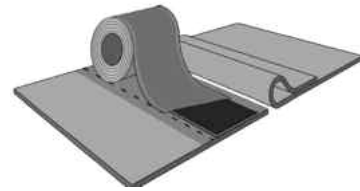
3. Apply QuickPrime Plus



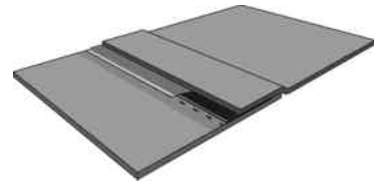
4. Check for dryness (touch-push test)



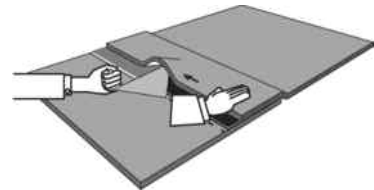
5. Install and roll the tape



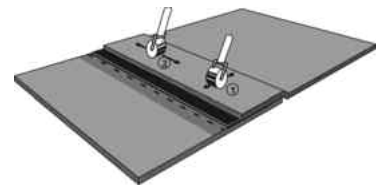
6. Check tape alignment and trim back if necessary



7. Remove paper backing



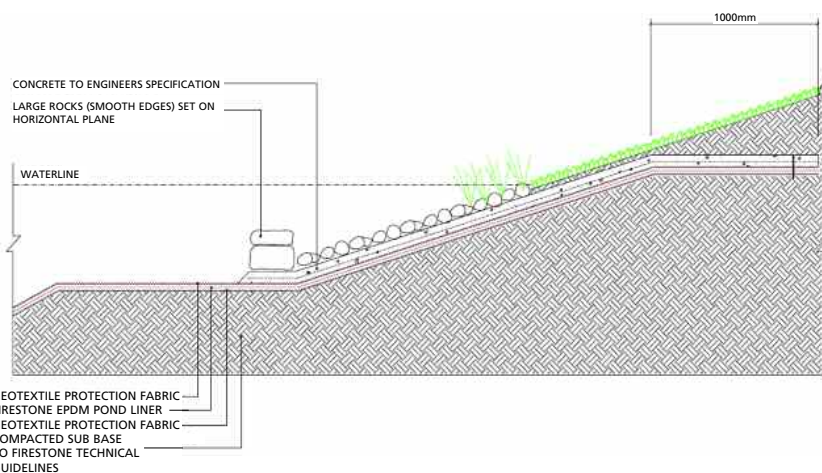
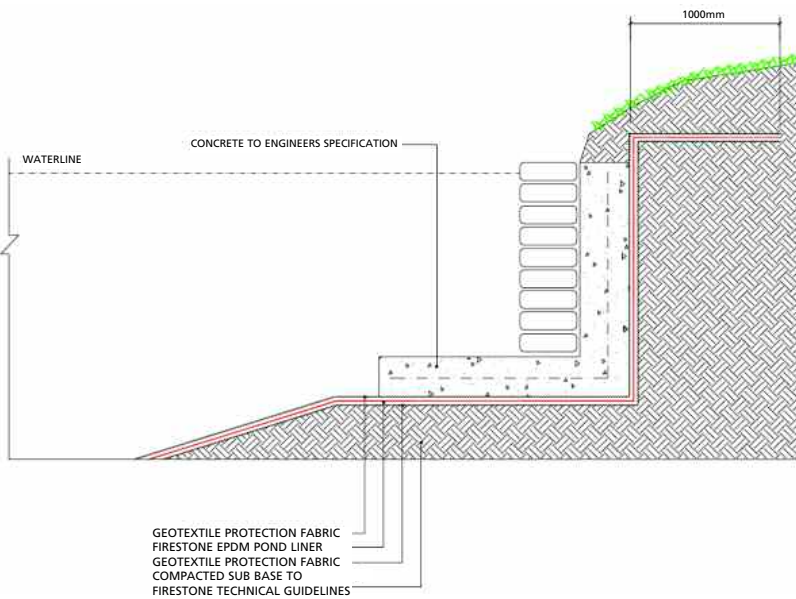
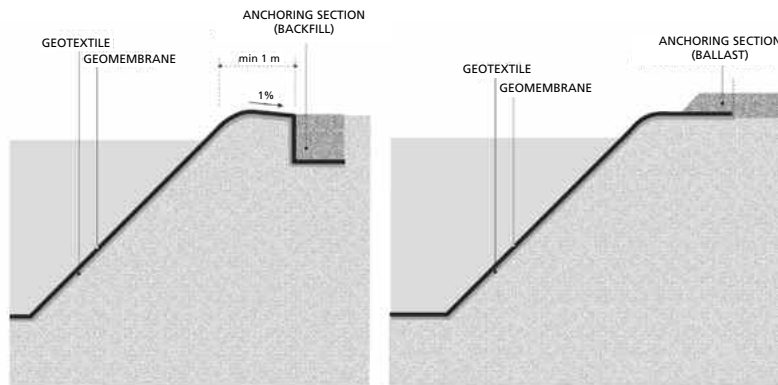
8. Roll the seam



Edge and bank details

These examples illustrate various types of edge and bank engineering solutions, showing the engineering drawing and a construction photograph.

We recommend that you should consult with a qualified engineer to provide accurate specifications and drawings for the particular edge you require.



Firestone PondGard

EPDM Geomembrane 1.02mm

A selection of roll sizes is shown in the table.



Firestone PondGard 1.02mm

Roll sizes

width x length	product code
(8'x100') 2.44m x 30.48m	GLP-11001
(10'x100') 3.05m x 30.48m	GLP-11002
(12'x100') 3.66m x 30.48m	GLP-11003
(14'x100') 4.27m x 30.48m	GLP-11004
(16'x100') 4.88m x 30.48m	GLP-11005
(18'x100') 5.49m x 30.48m	GLP-11006
(20'x100') 6.10m x 30.48m	GLP-11007
(22'x100') 6.71m x 30.48m	GLP-11008
(24'x100') 7.31m x 30.48m	GLP-11009
(26'x100') 7.92m x 30.48m	GLP-11010
(28'x100') 8.53m x 30.48m	GLP-11011
(30'x100') 9.14m x 30.48m	GLP-11012
(36'x100') 10.97m x 30.48m	GLP-11013
(40'x100') 12.19m x 30.48m	GLP-11014
(50'x100') 15.24m x 30.48m	GLP-11015

Geotextile Underlay

260gsm Polypropylene Felt

We strongly recommend that our geotextile underlay material is used beneath a flexible liner, not only to help protect it from penetration by sharp stones, roots etc, but also to stabilise soft subsoils and reduce excessive localised stretching of the liner. TS60 is a 260gsm non-woven needle punched polypropylene felt which offers advantages over other geotextiles, such as increased resistance to dynamic loads, greater tensile strength, superior long-term behaviour and complete environmental compatibility. See table for standard roll sizes – we can also supply by the metre.



TS60 Geotextile Underlay

260gsm rolls

width x length	product code
2m x 30.5m	GLP-81002
2m x 135.0m	GLP-81001

Firestone Quickseam Products

Firestone Quickseam™ splicing products form the best possible solution for field seaming, joining and repairing EPDM Liner. We can supply the full range of these products in a variety of full pack and split pack quantities. A selection of available products is shown in the table below.

A free quick reference seaming guide for use by Firestone trained installers is available in addition to the full Firestone Installation Manual.



The Universal Pipe Sleeve is designed to work with pipe diameters from 25mm – 175mm and includes a tin of primer

Firestone Installer Products

product description	product code
Quickseam 75mm splice tape roll (30.5m)	GLP-82005
Quickprime Plus tin, 3.78L (coverage approx. 60m linear)	GLP-82008
Splice Wash 19L (5 US gal.) tin	GLP-82010
Bonding Adhesive 19L (5 US gal.) tin (coverage approx. 25m²)	GLP-82012
Quickseam 230mm (9") Formflash roll (15.25m)	GLP-82015
Lap Sealant cartridge (coverage approx. 6m linear)	GLP-82022
Water-Block Sealant cartridge (coverage approx. 3m linear)	GLP-82025
Aluminium Termination Bar, 3m length	GLP-82028
Quickscrubber kit, 30 pads and 4 handles	GLP-82030
Universal Pipe Sleeve, 25mm – 175mm Ø	GLP-82037



Case Study: The Glasshouse, RHS Wisley

Kingcombe Aquacare Ltd were appointed principal contractor by the Royal Horticultural Society for the groundwork and installation of the 4,500m² reflecting lake as well as the internal tropical lily pond and 5m high cascade waterfall.

The lake is designed to collect the run off from the vast Glasshouse roof as well as to collect and store the under-liner drainage, thus providing a supplementary irrigation supply for the gardens.

The integrity of the lake has been assured by the installation of the Firestone geomembrane; compromising on the quality of the waterproof membrane would have proven to be a false economy in the long run. Being available in a maximum sheet size of 15.24m x 30.48m, maximum productivity on site is assured.

Kingcombe specify Firestone as its preferred geomembrane material of choice. Their installation staff have been trained and certified by Firestone and have carried out successful installations in the extreme conditions of an English winter and at the height of a Saudi summer.

Kingcombe Aquacare recommend Firestone EPDM Geomembrane as *"quite simply the most cost effective quality waterproofing membrane on the market"*.

www.kingcombe.com



Further information

Please call us for advice, technical specifications and quotations. See current price list for ordering, delivery requirements and full terms and conditions.

We are constantly striving to improve our products and value to our customers and therefore reserve the right to change product specifications without notice.



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