

PRODUCT DESCRIPTION

The formwork of the future is here now!

The innovative solution to conventional formwork Pecafil is the result of many years of intensive research and development overseas. The basic material consists of a steel wire mesh with a heat shrunk layer of polyethylene applied to both sides of the mesh. This combination creates a material that is both light and structurally strong, making it extremely easy to handle.

BENEFITS

- **Preformed** - Pecafil is pre-formed and delivered to site ready for assembly or it can be simply folded on site using a manual folder.
- **High Speed Formwork** - Pecafil is designed for fast assembly. No hammer, nails or saws, just tie wire.
- **Easy Installation Procedure** - Because it is preformed, it is easily assembled using on site labour.

SITE SAFETY BENEFITS

- Back-filling excavations earlier than with conventional formwork
- Minimising need for workers to be in excavations
- Reducing the heavy labour needed for conventional formwork
- Eliminating the need to strip formwork

AREAS OF APPLICATION

Pecafil is a versatile formworking material perfect for those radius specifications. The strength and versatility of Pecafil make it the natural choice for the following applications:

- Ground beams
- Footings and bases
- Pile Caps
- Construction joints (stop ends)
- Special shapes or curves
- Void formation
- Ribbed and waffle slabs
- Penetrations
- Recesses
- Temporary fencing
- Safety screens
- Other variety of applications

HOW STRONG IS Pecafil?

To demonstrate the strength of Danterr's Pecafil as a formwork system, a sheet of Danterr's Pecafil was bent into a 450 mm square x 1200 mm high form to replicate a form that would be used for a footing. The base was restrained by wood blocks, and three straps were used to hold the form body together. Two reinforcing bars were inserted through opposite sides. The inside of the form was then filled with ready mixed concrete.

As Danterr's Pecafil is primarily intended as a sub-grade formwork system that is backfilled on the outside of the form before the concrete is poured, bulging of the sides will be negligible, as the sides will be restrained by the backfill.

SIZES

- 600 x 2250mm
- 900 x 2250mm
- 1200 x 2250mm
- 1500 x 2250mm
- 1800 x 2250mm
- 1875 x 2250mm

TECHNICAL SPECIFICATION

	STANDARD	OTHER Pecafil TYPES AVAILABLE UPON REQUEST		
-->	VR6 STANDARD	VR4	VR8	VR10
Main Wire Size (Normal)	5.5mm Diameter	4mm Diameter	7.5mm Diameter	9.8mm Diameter
Main Wire Spacing	150mm c/c	100mm c/c	150mm c/c	150mm c/c
Cross Wire Size (Nominal)	4mm Diameter	4mm Diameter	4mm Diameter	4mm Diameter
Wire Specification	High tensile steel of tensile strength 485 N/mm ² - non galvanised	High tensile steel of tensile strength 485 N/mm ² - non galvanised	High tensile steel of tensile strength 485 N/mm ² - non galvanised	High tensile steel of tensile strength 485 N/mm ² - non galvanised
Galvanised Code	VR6G - Galvanised wire	VR4G - Galvanised	VR8G - Galvanised	VR10G - Galvanised
Polyethylene Film	0.12mm thick - One layer each side	0.12mm thick - One layer each side	0.12mm thick - One layer each side	0.12mm thick - One layer each side
Polyethylene Colour (*)	Green	Green	Green	Green
Weight	2.64kg/m ²	2.62kg/m ²	3.78kg/m ²	5.69kg/m ²
Standard Size	2250mm	2250mm	2250mm	2250mm
a) Width	Can be varied according to order requirements	Can be varied according to order requirements	Can be varied according to order requirements	Can be varied according to order requirements
b) Height				

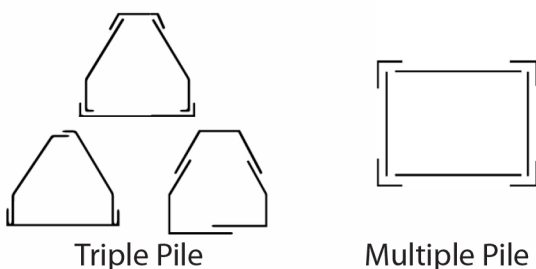
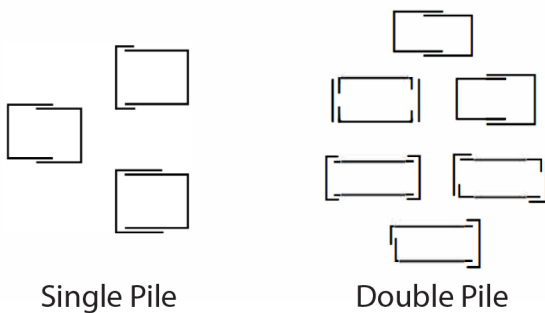
PERFORMANCE COMPARISON

Performance Dimensions	Pecafil	Conventional (Timber/Plywood)	Aluminium/ Steel Formwork	Advantaged of Pecafil
Speed	Faster	Slower	Medium	<ul style="list-style-type: none"> - Early completion - Saving in preliminaries cost - Client incentives - Less dependent on weather
Investment Cost	Low	Low	High	<ul style="list-style-type: none"> - Low investment cost
Labour Requirement	Lower	Higher	Medium	<ul style="list-style-type: none"> - Less Reliance on skilled labour - Low Labour costs
Skills	General Workers	Skilled Carpentars & General Workers	Skilled Workers	<ul style="list-style-type: none"> - Saving in labour cost - Availability > speed
Installation	Light & Easy	Tedious & Time Consuming	Simple but Skilled Labour Required	<ul style="list-style-type: none"> - Save time - Saving in labour cost
Debris Removal	Not Required	Required	Not Required	<ul style="list-style-type: none"> - Saving in debris removal cost - Save the environment/forest
Lifting Device/ Cranage	Man Handled	Cranage Required	Cranage Required	<ul style="list-style-type: none"> - Smaller storage space - More working space
Storage Requirement	Minimum	High	High	<ul style="list-style-type: none"> - Saving a machinery/cranage cost - Saving in operator cost
Formwork Removal	Not Required	Required	Required	<ul style="list-style-type: none"> - Save time
Environmental Acceptance	Environmentally friendly	Higher Rate Of Timber Consumption & Burning	Environmentally Friendly	<ul style="list-style-type: none"> - Enhances orporate image - Complies with legislation - Save the forest
Site Cleanliess	Neat & Clean	Untidy, Dangerous & Hazardous	Neat & Clean	<ul style="list-style-type: none"> - Enhance site safety - Enhance corporate image -Improve productivity
Corporate Image	Excelllent	Poor	Good	<ul style="list-style-type: none"> - Enhance corporate image

APPLICATION METHOD

1. Apply lean concrete blinding after pile cap excavation.
2. Fix reinforcement cage and provide the necessary spacing from the blinding to allow for the concrete cover.
3. Place Pecafil around perimeter of pile cap after strategically securing strips of long spacers or equivalent.
4. Backfill excavation up to 150 mm from the top of the Pecafil to avoid contamination.
5. Pour and vibrate the concrete in accordance with good concreting practice.
6. The Pecafil remains in the ground.

TYPICAL LAYOUTS



FOUNDATION BASES

Bases can be constructed from either L-shapes or flat stripes of Pecafil similar to either beam or pile cap construction. Lean concrete blinding is applied in the traditional manner, and the reinforcement cage complete with spacer blocks at the bottom is lowered onto the blinding.

Pecafil is then placed against the side of the cage and spaced off the reinforcement with strips of long spacers, bar chairs or equivalent.

Backfill excavation up to 150mm from the top of the Pecafil to prevent contamination.

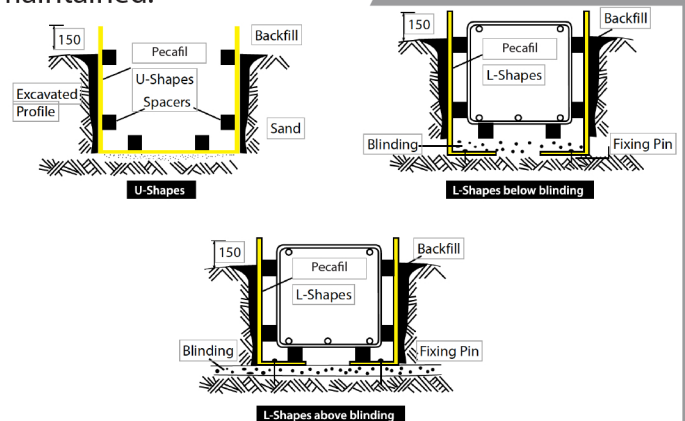
BEAM OPTIONS

Ground beams can be divided into two categories:

1. **Suspended beams (on piled foundation)**
The ground on which the beam is constructed should be capable of safely supporting the weight of wet concrete during construction. Only the nominal surface compaction is required and a thin layer of sand blinding to level the formation and bed-in the beam soffit may be necessary.

2. **Ground Bearing Beams**

These are founded in the bearing strata. Therefore, a thin layer of sand may be used as blinding to bed-in the Pecafil. Unless supported independently, Pecafil relies on backfill to counteract the pressure exerted by the concrete pour. Suitable spacers attached to the reinforcement cage ensure the beam profile is maintained.



SUPPORT TECHNIQUES

Girders

For beams and footings up to and including 1.5m in depth, where the Pecafil formwork is required to be re-used several times, the fastest and easiest technique is the girder system. This consists of a system of tie rods and girders strategically placed to give rigidity to the system during concreting. A simple locking mechanism at each end of the tie rod is designed to lock or unlock the girder and Pecafil with great ease and speed. The Pecafil girder system for foundation formworking consist of:

- Pecafil VR6
- Tie rods and locking nails

The Pecafil foundation formworking system represents the most economical alternative to conventional formwork.

Progressive Backfill Method

Pecafil is supplied in U-Shapes for beams and preformed strips for footings to form the required profiles. These are assembled on the blinding, wired together, and lined up. Placing approximately 200mm of backfill against the Pecafil stabilises the material prior to the concrete pour.

Backfilling should continue together with the concrete pour to counteract the increasing pressure on the Pecafil as the level of the concrete pour rises. Backfilling is required up to withing 150mm from the top of the beams and footings to avoid contamination.

Spacing timbers are recommended to maintain the beam width, but once the pour reaches the top of the Pecafil these should be removed to allow vibration and surface finishing to the concrete.

Construction Joints

Pecafil is suitable material for construction joints. Depending on the depth of concrete to be retained,

support methods may vary.

Massive foundations such as those used for high-rise buildings have many construction joints.

Pecafil provides a tearproof formworking membrane which allows starter bars to be fixed in position without drilling. The timber joist bracing for the Pecafil will also act as a support for the reinforcement.