CLAIMS

1. A method of forming a cement-based material pad comprising a plurality of drainage holes, the method comprising:

providing a form comprising a sheet and a plurality of straight conduits, each conduit having an upper end and a lower end, wherein each conduit has a constant cross-section and forms a channel from the upper end to the lower end that passes through the sheet; and the form being an open-top form whereby a cement-based material can be poured onto the sheet to surround the conduits;

placing said form; and

pouring ~~a~~ the cement-based material into said form until the cement-based material surrounds the conduits, leaving the upper ends of the conduits exposed;

wherein the plurality of conduits are arranged such that a cement-based material pad having porosity of 1 to 50 % is formed; and

wherein the form further comprises a connecting means holding each of the plurality of conduits parallel to one another and wherein when the cement-based material is poured onto the sheet to surround the conduits, the upper ends of the conduits and the connecting means are left exposed; and

wherein the method further comprising the step of trimming a portion of each of the plurality of conduits exposed from the cement-based material.

2. The method of claim 1, wherein each of the plurality of conduits are arranged substantially perpendicular to the sheet and/or wherein each of the plurality of conduits are arranged parallel to one another.

3. The method of any one of claims 1 to 2, wherein the sheet is a flexible sheet.

4. The method of any one of claims 1 to 3, wherein the sheet and the lower end of the conduits are adjacent.

~~5. The method of any one of claims 1 to 4, wherein the form further comprises a connecting means holding each of the plurality of conduits parallel to one another and wherein when the cement-based material is poured onto the sheet to surround the conduits, the upper ends of the conduits and the connecting means are left exposed.~~

~~6. A method of forming a cement-based material pad comprising a plurality of drainage holes, the method comprising:~~

~~providing a form comprising a plurality of parallel pins each having a shaft, a head and a pointed end; a connecting means configured to hold the plurality of pins parallel to each other, wherein the connecting means connects the head of each of the plurality of parallel pins; a plurality of straight conduits, each having an upper end and a lower end; wherein each conduit has a constant cross-section and receives one of the plurality of parallel pins such that the pointed ends of each of the plurality of parallel pins extend beyond the lower end of each conduit; whereby a cement-based material can be poured to surround the conduits;~~

~~placing said form; and~~

~~pouring a cement-based material into said form until the cement-based material surrounds the conduits, leaving the upper ends of the conduits exposed.~~

~~7~~5. The method of any one of claims 1 to ~~6~~4, wherein each of the plurality of conduits has a circular cross-section.

~~8~~6. The method of claim ~~6~~5, wherein each of the plurality of conduits independently has a diameter of about 1 to about 20 mm, optionally about 2 to about 15 mm, optionally about 3 to about 10 mm.

~~9~~7. The method of any one of claims 1 to ~~8~~6, wherein each of the plurality of conduits and/or the sheet is formed from plastic or a biodegradable material.

~~10~~8. The method of any one of claims 1 to ~~9~~7, wherein the form further comprises side walls to contain the cement-based material.

~~11~~9. The method of any preceding claim further comprising the step of setting the cement-based material, optionally further comprising the step of curing the cement-based material.

~~12. The method of any preceding claim further comprising the step of removing the plurality of pins from each of said conduits.~~

~~13. The method of any preceding claim further comprising the step of trimming a portion of each of the plurality of conduits exposed from the cement-based material.~~

~~14~~10. The method of any preceding claim wherein the plurality of conduits are arranged such that a cement-based material pad having porosity of ~~about 1 to about 50 % is formed, optionally about~~ 2 to ~~about~~ 40 %, optionally ~~about~~ 3 to ~~about~~ 30 %.

~~15~~11. The method of any preceding claim wherein the form is be placed on a sub-base layer formed of packed coarse aggregates or a geocellular layer.

~~16~~12. The method of any preceding claim wherein the method is carried out on site.

~~17~~13. The method of any preceding claim wherein the cement-based material is a construction material that comprises a binder and optionally an aggregate.

~~18~~14. The method of claim ~~17~~13, wherein the binder is a cement binder or a binder suitable for use in a construction material as an alternative to a cement binder in conventional cement concretes (for example bitumen materials or polymer binders or resins).

~~19~~15. The method of any preceding claim wherein the cement-based material is a material that comprises a cement binder and optionally an aggregate (such as particles of stone or sand), optionally wherein the cement-based material is mortar (for example, self-compacting mortar) or concrete.

~~20~~16. The method of any preceding claim wherein the cement-based material is self compacting mortar.

~~21~~17. The method of claim ~~17~~13, wherein the cement-based material is a bitumen bound material, such as asphalt, or a polymer concrete or any other cement alternative.

~~22~~18. The method of any preceding claim wherein the cement-based material pad formed from the method has a compressive strength of ~~about~~ 50 MPa or greater.

~~23~~19. A form for use in producing a cement-based material pad comprising a plurality of drainage holes, the form comprising:

a sheet; and

a plurality of straight conduits, each having an upper end and a lower end;

wherein each conduit has a constant cross-section and forms a channel from the upper end to the lower end that passes through the sheet; and the form

being an open-top form whereby a cement-based material can be poured onto the sheet to surround the conduits, leaving the upper ends of the conduits exposed;

wherein the plurality of conduits are arranged such that the form is for use in producing cement-based material pad having porosity of 1 to 50 %; and

wherein the form further comprises a connecting means holding each of the plurality of conduits parallel to one another and wherein when the cement-based material is poured onto the sheet to surround the conduits, the upper ends of the conduits and the connecting means are left exposed.

~~24. A form for use in producing a cement-based material pad comprising a plurality of drainage holes, the form comprising:~~

~~a plurality of parallel pins each having a shaft, a head and a pointed end;~~

~~a connecting means configured to hold the plurality of pins parallel to each other, wherein the connecting means connects the head of each of the plurality of parallel pins;~~

~~a plurality of straight conduits, each having an upper end and a lower end;~~

~~wherein each conduit has a constant cross-section and is configured to receive one of the plurality of parallel pins;~~

~~wherein a cement-based material can be poured to surround the conduits, leaving the upper ends of the conduits exposed; and~~

~~each of the parallel pins being configured such that the pointed end extends beyond the lower end of each conduit so as to prevent a cement-based material obstructing the lower end of each conduit when the cement-based material is poured to surround the conduits.~~

~~25~~20. A cement-based material pad comprising a plurality of drainage holes formed by a method as described in any of claims 1 to ~~22~~18.