A plinth constructed of plastics material including a platform; a continuous side wall depending from said platform and adapted to rest on the ground, said side wall including one or more peripheral portions and one or more divider portions, each of said one or more divider portions dividing the platform into at least two load bearing sections and each divider portion including two spaced apart divider wall portions joined by a bottom wall adapted to rest on the ground so as to support the adjacent load bearing sections of said platform, said platform, said divider wall portions and said bottom wall providing a continuous top face.
PLINTHS CONSTRUCTED OF PLASTIC MATERIAL

[0001] This invention relates to plinths in particular, to plinths constructed of plastics materials.

[0002] Installations such as air conditioners, storage water heaters, water filter apparatus and the like have one or more units that need to be supported on a plinth or the like to lessen the likelihood of damage from water run off and to minimise corrosion. Commonly, such units are situated outdoors and are placed on relatively heavy, concrete plinths to support them off the ground. Generally, concrete plinths are heavy, awkward to carry and tend to have some rough edges that can cause damage to vehicles transporting them and/or to persons carrying them. Such problems have been ameliorated by the use of plinths made from plastics materials. However, the presently available plinths moulded from plastics materials are more expensive to produce than desired.

[0003] One object of the present invention is to provide a plinth constructed of plastics material which ameliorates the aforementioned problem. Another object is to provide a plinth which will be reliable and efficient in use.

[0004] With the foregoing in view, the present invention in one aspect resides broadly in a plinth constructed of plastics material including:

[0005] a platform;

[0006] a continuous side wall depending from said platform and adapted to rest on the ground, said side wall including one or more peripheral portions and one or more divider portions, each of said one or more divider portions dividing the platform into at least two load bearing sections and each divider portion including two spaced apart divider wall portions joined by a bottom wall adapted to rest on the ground so as to support the adjacent load bearing sections of said platform, said platform, said divider wall portions and said bottom wall providing a continuous upper face.

[0007] Preferably, each of said load bearing sections has at least one elongate support member extending thereacross and depending from said platform. In such form it is preferred that the elongate support members are connected to said peripheral wall portion at one end and to one of said divider wall portions at the other end. It is also preferred that said elongate support members be integral with said platform and said peripheral side wall and the respective divider wall portion. Preferably, the array density of said elongate support members between said divider wall portions and said peripheral wall portion is greater than the array density elsewhere.

[0008] Preferably, said bottom wall has a substantially planar lower surface thereby providing a suitable load transferring surface area for resting on the ground.

[0009] Preferably, said peripheral side wall terminates in an outwardly extending continuous flange having an upper surface and a lower surface, the flange being contiguous with said bottom wall and the lower surface being coplanar with the lower surface of said bottom wall.

[0010] Preferably, the plinth is constructed such that like plinths are nestable. To that end, it is preferred that said continuous side wall diverges away from said platform and that said elongate support members depend from said platform only part way to said bottom wall.

[0011] In another aspect, the invention resides broadly in a plinth constructed of plastics material including:

[0012] a platform having at least one peripheral corner;

[0013] a continuous side wall depending from said platform and terminating in a flange having a peripheral edge spaced from said side wall and a bottom face adapted to rest on the ground to support the platform, the portion of said side wall adjacent said at least one peripheral corner having a peripheral edge.

[0014] Preferably, at least a portion of said side wall adjacent said at least one peripheral corner is curved. In such form, it is preferred that a portion of said curved portion of said side wall is concentric with the edge of said flange to which it is adjacent. It is also preferred that the portion of said side wall adjacent said at least one peripheral edge includes an elongate corner portion joining said platform and a conical portion joining said flange and in such form it is preferred that said elongate corner portion extends over about half the height of the side wall.

[0015] In yet another aspect, the invention resides broadly in a plinth constructed of plastics material including:

[0016] a platform having at least one peripheral corner;

[0017] a continuous side wall depending from said platform and terminating in a flange having peripheral edge spaced from said side wall by a predetermined distance and a bottom face adapted to rest on the ground to support the platform, the predetermined distance, adjacent said at least one peripheral corner being less than the predetermined distance remote from said peripheral corner.

[0018] In order that the invention may be more easily understood and put into practical effect, reference will now be made to the accompanying drawings wherein:

[0019] FIG. 1 is an isometric view of a plinth according to the invention from above top;

[0020] FIG. 2 is an isometric view of the plinth of FIG. 1 from below;

[0021] FIG. 3 is an isometric view of two nested plinths of the type illustrated in FIG. 1;

[0022] FIG. 4 is an isometric view of another plinth according to the invention from above;

[0023] FIG. 5 is an isometric view of the plinth of FIG. 4 from below;

[0024] FIG. 6 is an isometric view of another plinth according to the invention from above;

[0025] FIG. 7 is an isometric view of the plinth of FIG. 6 from below;

[0026] FIG. 8 is a plan of the plinth of FIG. 6;

[0027] FIG. 9 is a front elevation of the plinth of FIG. 6;

[0028] FIG. 10 is an end elevation of the plinth of FIG. 6;

[0029] FIG. 11 is a sectional elevation of a corner portion of the plinth of FIG. 6 along line A-A; and

[0030] FIG. 12 is a sectional elevation of a corner portion of the plinth of FIG. 6 along line B-B.

[0031] The plinth 10 illustrated in FIG. 1 is generally rectangular in shape and is integrally molded from high density polyethylene (HDPE). The plinth includes a platform 11 having a continuous side wall 12 depending from and diverging away from the platform and terminating in an outwardly extending continuous flange 13 having an upper surface 13a and a lower surface 13b.

[0032] The side wall 12 is made up of opposed longer side wall portions 12a and 12c and opposed shorter side wall portions 12b and 12d extending between the longer side wall portions at their respective ends.

[0033] In addition, the side wall 12 is also made up of a pair of elongate divider portions 14, each divider portion being made up of a pair of opposed spaced apart divider wall por-
Each divider portion is straight and divides the platform into two load bearing sections 15a and 15b, with each divider portion extending from an end wall portion. Each divider portion is straight and divides the platform into two load bearing sections 15a and 15b, with each divider portion extending from an end wall portion. The divider wall portions each intersect to form a central square region that possesses the lowest array density of the plinth.

Whereas similarly sized square regions at each corner of the underside of the platform possess the highest array density whilst the remaining square regions possess an intermediate density. Advantageously, the plinth 20, is suitable for use with circular or square based hot water storage tanks.

The plinth 30 illustrated in FIGS. 6 to 12 show another embodiment of the invention where a conical portion of the side wall 31 adjacent each peripheral corner joins the flange adjacent its peripheral edge. The side wall portion 31 is concentric with the edge of the flange to which it is adjacent. The side wall 33 adjacent the peripheral edge 32 includes an elongate corner portion that joins the platform and the conical portion. The conical portion goes on to join the flange. The elongate corner portion extends over about the top half of the height of the side wall and the conical portion extends over about the bottom half the height of the side wall. Advantageously, the height of the elongate support members coincide with the height of the elongate corner portion.

As shown in FIG. 8 the flange has a peripheral edge spaced from the side wall and the portion of the side wall adjacent each peripheral corner joins the flange adjacent its peripheral edge. It will be appreciated that an un-illustrated alternative embodiment to the type of plinth in FIG. 6 need not have the divider portions. It will of course be realised that the above has been given by way of illustrative embodiment of the invention, all such modifications and variations thereto as would be apparent to persons skilled in the art are deemed to fall within the broad scope and ambit of the invention as is defined in the appended claims.

1-34. (canceled)

35. A plinth constructed of plastic material including: a platform having at least one peripheral corner; a continuous side wall depending from said platform and terminating in a flange having a peripheral edge spaced from said side wall and a bottom surface adapted to rest on the ground to support the platform, the portion of said side wall adjacent said at least one peripheral corner joining said flange adjacent its peripheral edge.

36. A plinth constructed of plastic material including: a platform having at least one peripheral corner; a continuous side wall depending from said platform and terminating in a flange having a bottom surface adapted to rest on the ground to support the platform, the width of the flange adjacent said at least one peripheral corner being less than the width at a position remote from said peripheral corner.