CLAIMS

1. A cushion pad for use with a rapid load testing system, the cushion pad comprising

   a block having an array of recesses in a first face, and formed of an elastomeric material;

   said recesses each having a channel in fluid communication with an outside surface of the block, other than the first face, for venting air from said recess;

   ~~wherein the~~said cushion pad is arranged to dampen an impact on a pile from a dynamic load~~.~~;

   said at least one recess, of said array of recesses, arranged to receive a cushion insert;

   wherein a number of cushion inserts received by said array of recesses is controllable in said cushion pad so as to select a dampening and elastic performance of said cushion pad.

~~2.~~ The cushion pad according to claim 1, ~~further including one or more cushion inserts, with each recess shaped to receive one cushion insert;~~

2. ~~such that,~~wherein on insertion the at least one cushion insert is flush with the first face.

3. The cushion pad according to claim 2, wherein the cushion insert is formed from a material having a different stiffness than the material of the block.

4. The cushion pad according to claim 2 or 3, wherein the number of cushion inserts is less than the number of recesses.

~~5. The cushion pad according to any one of claims 1 to 4, further including a second cushion pad, wherein said cushion pads are mountable to opposed ends of a counter weight to form a counter weight assembly, said counter weight assembly arranged to replace a drop hammer for use with said rapid load test.~~

~~6. The cushion pad according to claim 5, wherein the drop hammer assembly includes a second pair of cushion pads mountable to the opposed ends of the counter-weight.~~

~~7. The cushion pad according to claim 5 or 6, further including a hammer bucket; said hammer bucket including at least one cavity for receiving the counter- weight assembly;~~

~~8. The cushion pad according to claim 7, wherein said hammer bucket includes an array of cavities, each cavity arranged to receive the counter weight assembly.~~

~~9.~~5. A counter- weight assembly for use with a rapid load testing system, comprising a counter- weight;

a pair of cushion pads according to claim 1 to 4, each of said cushion pads mounted to opposed ends of the counter-weight;

said counter-weight assembly forming a drop hammer for use with said rapid load test.

6. The counter-weight assembly according to claim 5, further including a second pair of cushion pads mountable to the opposed ends of the counter-weight.

7. A hammer bucket assembly for use with a rapid load testing system, comprising:

at least one counter-weight assembly according to any one of claims 5 to 6;

a hammer bucket, said hammer bucket including at least one cavity for receiving the counter-weight assembly.

8. The hammer bucket assembly according to claim 7, wherein said hammer bucket includes an array of cavities, each cavity arranged to receive the counter weight assembly.