

METHOD AND APPARATUS FOR TESTING
LOAD-BEARING CAPACITY

ABSTRACT

5 In an embodiment, a hydraulic jack is provided having a first portion and a second
portion. The first portion attached to a first section of a structure and the second portion
attached to a second section of the structure. When a pressurized fluid is forced between the
first portion and the second portion, a load is transferred to the first section and the second
10 section by the pressure of the fluid on the first portion and the second portion. The first
section and the second section are forced apart by the load, thus creating or enlarging at least
one void in the structure. The pressurized fluid fills or partially fills one or more of the at
least one void, thereby increasing the surface area effectively normal to the direction of the
load in contact with the pressurized fluid.

15 [FIG. 1A]