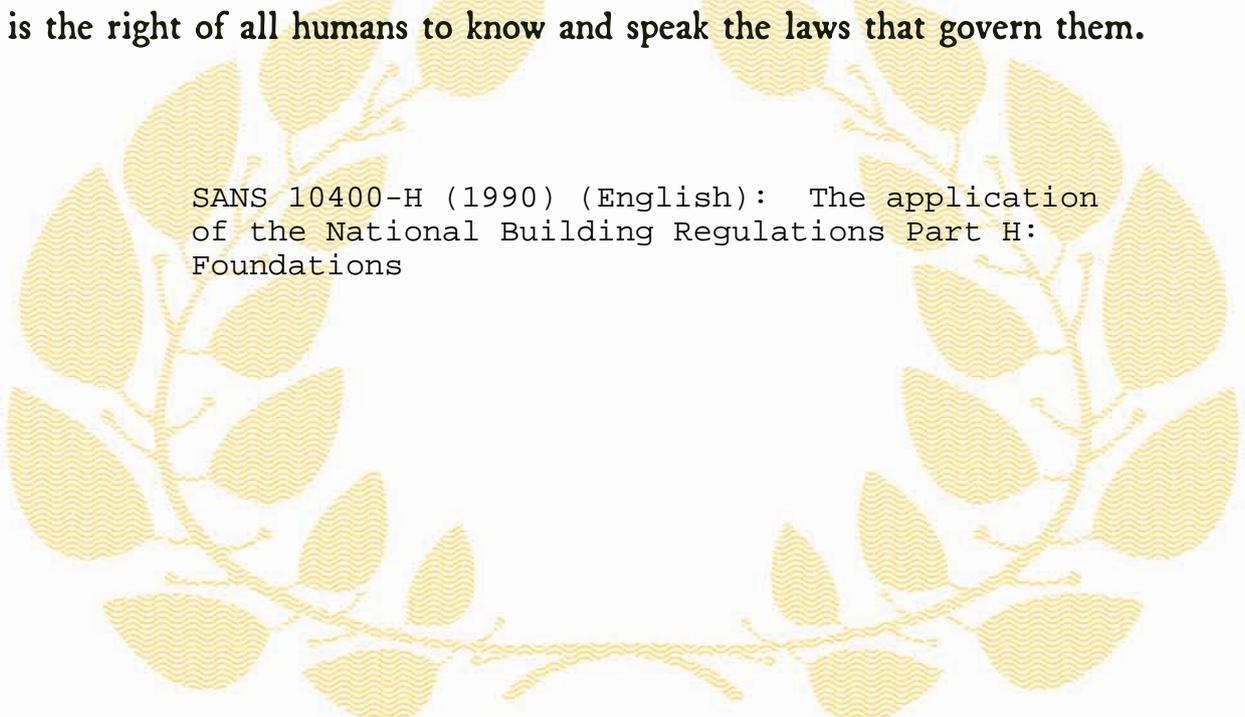




Republic of South Africa

✎ EDICT OF GOVERNMENT ✎

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.



SANS 10400-H (1990) (English): The application
of the National Building Regulations Part H:
Foundations



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PART H FOUNDATIONS

REGULATIONS

H1 GENERAL REQUIREMENT

(1) The foundation of any building shall be designed to safely transmit all the loads from such building to the ground.

(2) The requirement of subregulation (1) shall be deemed to be satisfied where the design and construction of such foundation complies with Part H of section 3 of SABS 0400.

DEEMED-TO-SATISFY RULES

HH1 GENERAL

The regulation contained in Part H of the National Building Regulations shall be deemed to be satisfied where —

- (a) any foundation is the subject of a rational design in accordance with the requirements contained in Part B; or
- (b) the construction of any foundation complies with deemed-to-satisfy rules contained in the following provisions of this Part.

HH2 EMPIRICAL RULES FOR FOUNDATIONS

Any foundation constructed in accordance with subrules **HH2.2** to **HH2.8** inclusive shall not be used to support any wall forming part of the structural system of any building except where —

- (a) such wall is placed centrally on such foundation;
- (b) such wall is the wall of any building contemplated in rule **KK2** of this code; and
- (c) the soil supporting such foundation is not a heaving soil or shrinkable clay or a soil with a collapsible fabric.

HH2.2 Any such foundation shall be constructed in concrete having a compressive strength of not less than 10 MPa at 28 days, or be mixed in proportions by volume of 1 part of cement, 4 parts of sand and 5 parts of coarse aggregate.

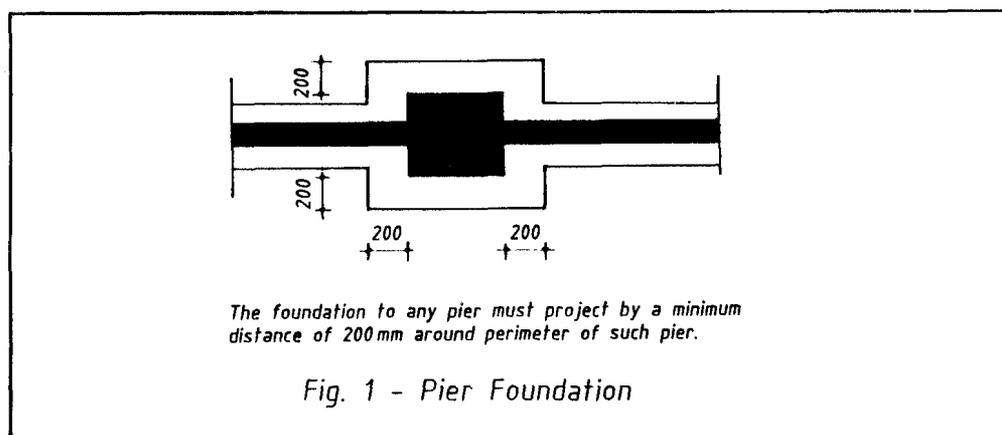
HH2.3 Any continuous strip foundation shall have a thickness of not less than 200 mm: Provided that where the foundation is laid on solid rock such thickness shall not apply.

HH2.4 The width of any continuous strip foundation shall be not less than —

- (a) 600 mm in the case of a foundation to a load-bearing or free standing masonry wall or to a timber framed wall supporting a roof with Class B covering contemplated in subrule **LL3.4** of this code; or
- (b) 400 mm in the case of a foundation to a non-load-bearing internal masonry wall or to a timber framed wall supporting a roof with Class A or Class C covering contemplated in subrule **LL3.4** of this code.

- HH2.5**
- (a) Where any strip foundation is laid at more than one level the higher portion of the foundation shall extend over the lower portion for a distance at least equal to the thickness of the foundation.
 - (b) Any void between the top of the lower portion of such foundation and the underside of the higher portion shall be completely filled with concrete of the same strength as that required for such foundation.
- HH2.6** Where any concrete floor slab is thickened to form a foundation —
- (a) the thickness, including that of such floor slab, shall be not less than that required for a continuous strip foundation; and
 - (b) the width of the thickened portion below such floor slab shall be not less than that required for a continuous-strip foundation:
- Provided that such thickening shall not be required under non-load-bearing timber-framed walls.
- HH2.7**
- (a) Where any pier is built into or forms part of any wall the thickness of the foundation to such pier shall be the same as that required for such wall.
 - (b) The length and width of the foundation to such pier shall be such as to project by 200 mm at any point on the perimeter of such pier.

Commentary: Figure 1 illustrates the requirements of HH2.7(b).



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- HH2.8**
- (a) The thickness of the foundation to any sleeper pier or sleeper wall shall be not less than 150 mm .
 - (b) The length or width of the foundation to such sleeper pier shall be not less than 450 mm .
 - (c) The width of the foundation to such sleeper wall shall be not less than 300 mm .