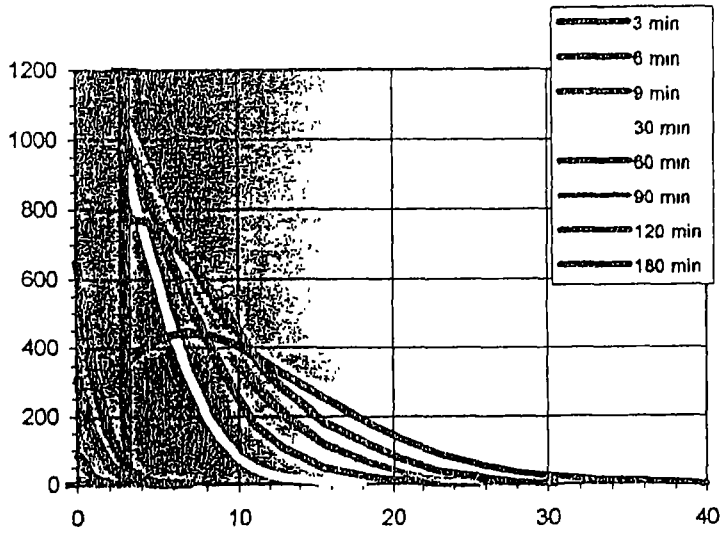

3 min
6 min
9 min
30 min
60 min
90 min
120 min
180 min
1200
1000
800
600
400
200
0
0
10
20
30
40

Fig. 1

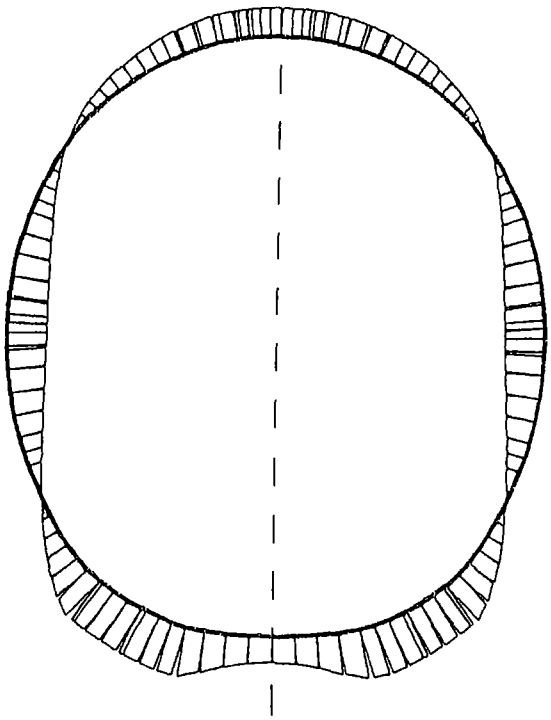


Fig. 2

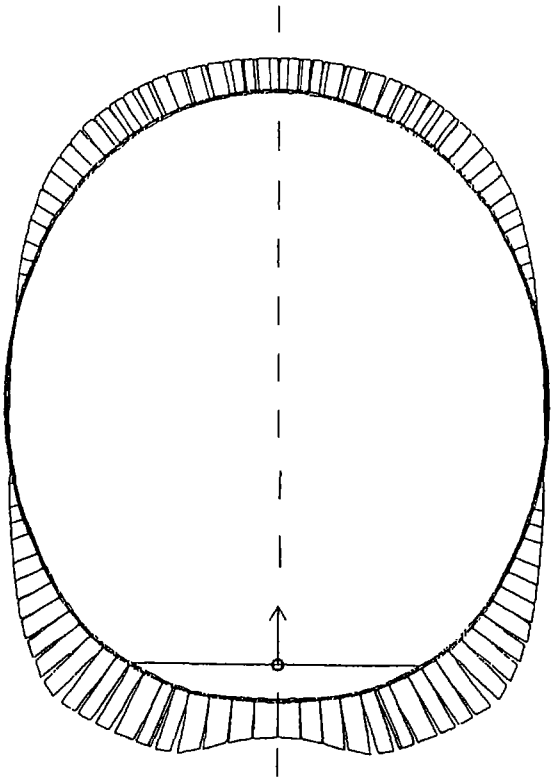


Fig. 3

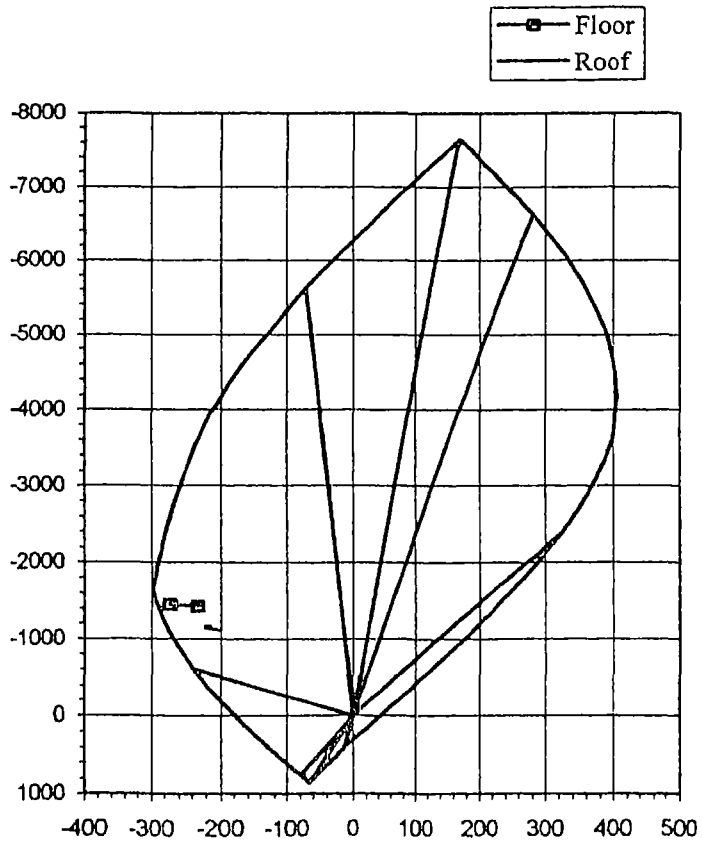

Floor
Roof
-8000
-7000
-6000
-5000
-4000
-3000
-2000
-1000
0
1000
-400
-300
-200
-100
0
100
200
300
400
500

Fig. 4

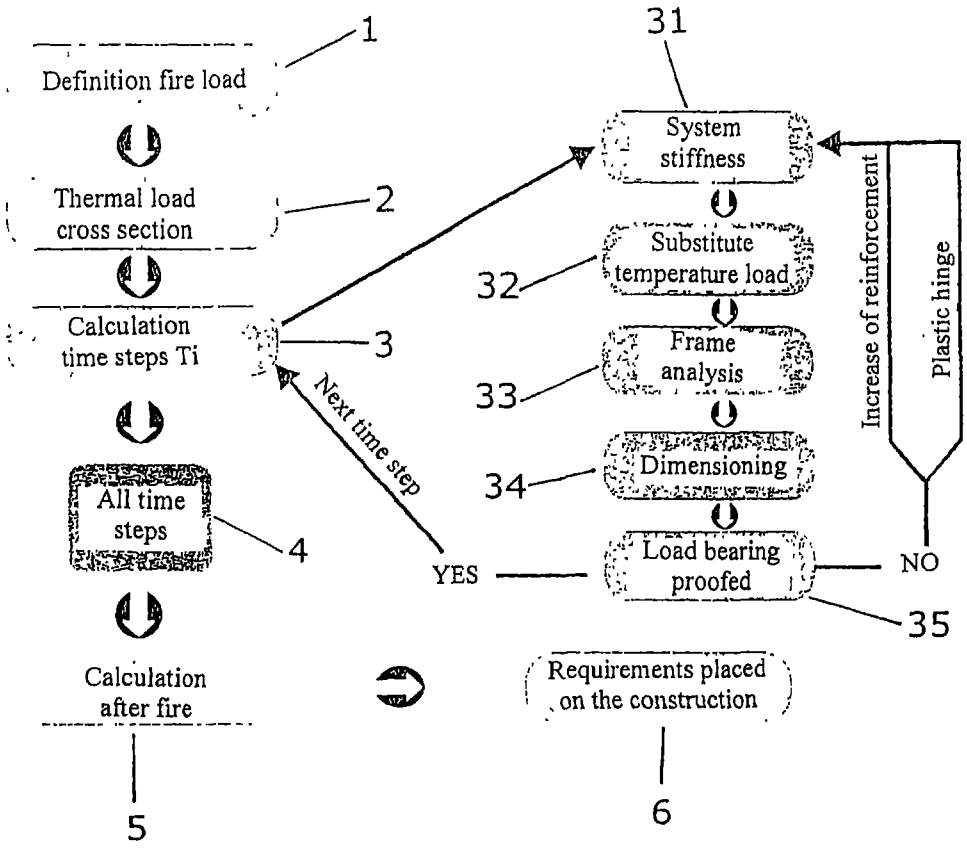

1
Definition fire load
Thermal load cross section
2
Calculation time steps Ti
3
All time steps
4
Calculation after fire
5
31
System stiffness
32
Substitute temperature load
33
Frame analysis
34
Dimensioning
Load bearing proofed
35
YES
NO
Next time step
Increase of reinforcement
Plastic hinge
Requirements placed on the construction
6

Fig. 5