Patent Claims

1. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ for a scaffolding, having an access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ which closes an access opening ~~(12)~~ in the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ and which is supported in an opening manner on the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ in a state connected to the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~,
wherein, in a region ~~(18)~~ in which the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is connected to the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~, there is arranged at least one resiliently deformable element ~~(20; 22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ which becomes deformed when the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is opened,
wherein there is produced in the resiliently deformable element ~~(20; 22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ by the deformation of the resiliently deformable element a force which is directed counter to the opening movement of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~
wherein the force increases abruptly from an opening angle near a perpendicular position of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ and wherein
the opening angle α near the perpendicular position of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is between 75° and 87°, in particular is less than or equal to 80.

2. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 1, characterised in that the region in which the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is connected to the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ extends over an edge side of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~.

3. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to any one of the preceding claims, characterised in that the edge ~~(16)~~ of the access opening ~~(12)~~ has an edge formation, in which the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is inserted, and wherein the edge formation is constructed in such a manner that the surface of the upper side of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ forms without any step a plane with the surface of the upper side of the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~.

4. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to any one of the preceding claims, characterised in that the at least one resiliently deformable element ~~(20; 22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ is in the form of an elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ of a flexibly resilient and/or visco-resilient material.

5. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 4, characterised in that the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ has a substantially rectangular cross-section.

6. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 4 or 5, characterised in that the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ has an at least partially V-like ~~(40)~~ or W-like ~~(50)~~ or zig-zag-like ~~(60)~~ or wave-like ~~(70)~~ cross-section.

7. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to any one of the preceding claims, characterised in that the at least one resiliently deformable element ~~(20; 22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ is connected, on the one hand, to the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ and, on the other hand, to the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~.

8. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 7, characterised in that the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ has, along a portion of the edge thereof, a first groove ~~(28; 42; 52; 90; 102; 132)~~, in which the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ engages with a first part-region, and in that the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ has, along a portion of the edge ~~(16)~~ of the access opening ~~(12)~~ which is opposite the first groove ~~(28; 42; 52; 90; 102; 132)~~ along the portion of the edge of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~, a second groove ~~(30; 46; 56; 82; 104; 130)~~ in which the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ engages with a second part-region, and wherein the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ is retained both in the first groove ~~(28; 42; 52;~~

~~90; 102; 132)~~ along the portion of the edge of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ and in the second groove ~~(30; 46; 56; 82; 104; 130)~~ of the access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ along the portion of the edge ~~(16)~~ of the access opening ~~(12)~~.

9. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 8, characterised in that the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ is secured in the first groove ~~(28; 42; 52; 90; 102; 132)~~ along the portion of the edge of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ and in the second groove ~~(30; 46; 56; 82; 104; 130)~~ of the access flooring ~~10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ along the portion of the edge ~~(16)~~ of the access opening ~~(12)~~ by rivets ~~(96)~~ and/or by screws ~~(86; 166)~~ and/or by adhesive connections and/or by undercuts ~~(88; 128)~~.

10. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to any one of claims 4 to 9, characterised in that the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ is subjected to material deformation when the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is opened, and in that one or more cavities ~~(146; 154)~~ are at least partially formed in the region of the material deformation.

11. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 10, characterised in that the at least one cavity ~~(154)~~ is closed at least partially in the direction of the longitudinal sides of the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~.

12. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 10 or claim 11, characterised in that the at least one cavity ~~(146)~~ is at least partially formed by an indentation which extends in the longitudinal direction of the elongate profile-member ~~(22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~ in the surface of a longitudinal side.

13. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to any one of the preceding claims, characterised in that the region ~~(18)~~ in which the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~ is connected to the access flooring ~~10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ has a flexible cover ~~(164)~~, which covers the at least one resiliently deformable element ~~(20; 22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~.

14. Access flooring ~~(10; 48; 58; 84; 100; 106; 120; 144; 152; 160; 174)~~ according to claim 13, characterised in that the cover ~~(164)~~ produces, during the opening movement of the access door ~~(14; 44; 54; 92; 98; 108; 122; 142; 150; 162; 172)~~, a force which cooperates with the restoring force of the resiliently deformable element ~~(20; 22; 40; 50; 80; 94; 110; 124; 140; 148; 156; 176; 178)~~.