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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 12772-2026

Replacing GB/T 12772-2016

**Cast iron pipes, fittings and accessories with flexible joint for
building drainage**

建筑排水柔性接口铸铁管、管件和附件

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document supersedes GB/T 12772-2016 "Flexible Joint Cast Iron Pipes, Fittings and Accessories for Drainage" and is consistent with GB/T 12772-2016.

Compared to previous versions, aside from structural adjustments and editorial changes,

the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2016 edition);
- b) Terms and definitions have been changed (see Chapter 3, Chapter 3 of the 2016 edition);
- c) The wall thickness dimensions and unit weight of type W, W1, and B pipe fittings have been changed (see 5.1.1, 5.2.1, and Appendix A, 2016 edition).
5.1.1, 5.2.1 and Appendix A);
- d) Combine type B1 and type B2 pipe fittings into type B pipe fittings (see Table 3, Figures A.88 to A.122 and Tables A.88 to A.122, 2016).
(See Figures 7, Table 6, Figures A.89 to A.121, and Tables A.89 to A.121 of the version).
- e) Added the clause "Type B fittings should be used in conjunction with Type W straight pipes" (see 5.2.2.4);
- f) Large-radius elbows for Type A, Type W, and Type B pipe fittings have been added (see Figure A.2, Table A.2, Figure A.36, Table A.36, Figure A.89, and...).
Table A.89);
- g) A hemispherical vent cap was added (see 5.2.2.6, Figure A.77 and Table A.77);
- h) The structural dimensions of the H-tube were modified, and anti-backflow structural requirements and marking requirements were added for the height difference between the two ends of the venting inclined tube (see 5.4.3).
9.2, Figures A.17, A.37, A.72 and A.104, 5.4.3, 9.2, Figures A.17 and A.37 in the 2016 edition.
Figures A.72 and A.104);
- i) The dimensions of the water-replenishing trap structure have been changed, and a requirement has been added that the height difference between the water inlet and outlet is greater than or equal to 10mm.
(See Figure A.6, Table A.6, Figure A.32, Table A.32, Figure A.69, Table A.69, Figure A.108, Table A.108, 2016 edition)
Figure A.6, Table A.6, Figure A.32, Table A.32, Figure A.69, Table A.69, Figure A.108, Table A.108);
- j) The dimensions and markings of the riser inspection port and inspection port cover have been changed (see Figure A.19, Table A.19, Figure A.43, Table A.43, Figure A.76).
Table A.76, Figure A.92, Table A.92, Figure B.3, Table B.3, Figure A.19, Table A.19, Figure A.43, Table A.43 (2016 edition)

Figure A.76, Table A.76, Figure A.92, Table A.92, Figure B.3, Table B.3);

k) The excessively long interface dimensions of the Type A H-tube, Y-vent tube, and H-vent tube were changed (see Figure A.16, Table A.16, Figure A.17).

Table A.17, Figure A.18, Table A.18, Figure A.16, Table A.16, Figure A.17, Table A.17, Figure A.18 (2016 edition)

Table A.18);

l) Infrequently used in-floor drainage fittings have been removed; the remaining in-floor drainage fittings are now classified as W1 type pipes, based on their connection to the toilet outlet.

Scope of application (see Appendix A, Appendix A of the 2016 edition);

m) Requirements have been added regarding performance dimensions, water seal depth, H-pipe venting angle tube height difference, inspection port opening diameter, and cleanout port opening diameter.

(See 5.4);

n) Change "free length" to "interface sealing area length" (see 5.4.1, Figure 9 and Table 6; 5.2.3, Figure 9 and Table 7 in the 2016 version);

o) Change "Dimensional tolerances" from "Dimensions" to "Structural Dimensional Tolerances" (see 5.5, 7.6.4, and 5.4 and 7.6 in the 2016 version);

p) Added requirements for the inner and outer diameter deviations of the same pipe ends, and straight pipes and fittings of the same series (see 5.5.1.3, 5.5.1.4);

q) The permissible lower deviation in weight for straight pipes and fittings has been modified, narrowing the range of permissible lower deviation (see 5.6.2, 5.6.3, 2016 version).

5.6.2, 5.6.3);

r) The phosphorus content requirements for cast iron have been changed (see 6.1, 2016 edition of 6.1);

s) The tensile strength was changed to the bulk tensile strength, and the specimen dimension diagram and test method were added (see 6.2.1, 7.2.1, 2016 version).

6.2.1, 7.2.1);

t) The external water pressure test has been changed to a negative pressure resistance test (see 6.3.2, F.7, 2016 version of 6.3.2, F.7);

u) Added requirements and testing methods for riser drainage capacity (see 6.3.5, 7.3.4).

v) Added drainage noise requirements and test methods for straight pipes and fittings used

in building drainage piping systems (see 6.3.6, 7.3.5);

w) It adds a provision prohibiting the use of putty to conceal casting defects such as porosity, sand holes, honeycomb, and substandard wall thickness in straight pipes and fittings.

Requirements (see 6.4.1);

x) An additional requirement has been added that pipe fittings with complex internal structures should be formed using resin sand core casting (see 6.4.4);

y) A new requirement has been added prohibiting the use of water-based putty as a base coat for anti-corrosion coatings (see 6.5.1);

z) Added specifications for the coating thickness on the inner and outer surfaces of straight pipes and fittings (see 6.5.2);

aa) The requirement for W1 type straight pipes and fittings to use epoxy resin anti-corrosion coating has been added (see 6.5.3);

(bb) Four coating properties have been added to the inner surface of W1 type straight pipes and fittings. adhesion, salt spray resistance, acid and alkali resistance, and temperature change resistance.

Performance requirements and test methods (see 6.5.5, 7.5.5);

(cc) Two coating performance requirements have been added for the inner surface coating of Type A and Type W straight pipes and fittings, and Type B fittings. adhesion and salt spray resistance.

and detection methods (see 6.5.6, 7.5.7);

(dd) Added adhesion requirements and test methods for the outer surface coatings of straight pipes and fittings, as well as for coatings used outdoors on the outer surface of straight pipes and fittings.

(See 6.5.7 and 7.5.4);

(ee) Added a test method for the weight of straight pipes and fittings (see 7.6.5);

(ff) The type testing regulations have been revised, simplifying the periodic retesting procedures determined by the type of straight pipe and fitting interface, the structural dimensions of the fittings, and the materials.

The re-inspection items (see 8.4) and other type inspection items are changed to once every three years (see 8.4.1);

(hh) An additional recommendation has been added that straight pipes should be packaged using wooden pipe supports, and pipe fittings should be packaged using slatted frames or jumbo bags (see 10.1);