

AMENDMENT NO. 3 DECEMBER 2024

TO

**IS 17373 : 2020 GEOSYNTHETICS — GEOGRIDS USED IN REINFORCED SOIL
RETAINING STRUCTURES — SPECIFICATION**

(Page 2, clause 4, see also Amendment No. 2) — Substitute the following for existing clause:

‘4 TYPES OF GEOGRIDS

Geogrids shall be of the following three types based on the tensile strength and aperture size:

- a) *Type 1* — Polyester knitted or woven geogrids having tensile strength in machine direction from 60 kN/m to 400 kN/m with aperture size in machine direction and cross machine direction from 10 mm to 50 mm;
- b) *Type 2* — Polyester bonded geogrids having tensile strength in machine direction from 30 kN/m to 300 kN/m with aperture size in machine direction from 50 mm to 1 000 mm and in cross machine direction from 10 mm to 300 mm; and
- c) *Type 3* — Polyester bonded geogrids having tensile strength in machine direction from 300 kN/m to 1 600 kN/m with aperture size in machine direction from 50 mm to 1 000 mm and in cross machine direction from 50 mm to 500 mm.’

Price Group 2

(Page 4, Table 2) — Substitute the following for the existing table:

Table 2 Requirements of Uniaxial Polyester Geogrids (Type 2, Bonded)

(Clause 6.2)

SI No.	Characteristic	Requirements																Method of Test, Ref to
		30/5	40/5	50/5	60/5	70/5	80/5	90/5	100/5	120/5	130/5	140/5	150/5	175/5	200/5	250/5	300/5	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(17)
i)	Ultimate tensile strength, kN/m, <i>Min</i> (see Note 2)																	IS 16635
	a) MD	≥ 30	≥ 40	≥ 50	≥ 60	≥ 70	≥ 80	≥ 90	≥ 100	≥ 120	≥ 130	≥ 140	≥ 150	≥ 175	≥ 200	≥ 250	≥ 300	
	b) CD	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	≥ 5	
ii)	Elongation at designated load, percent	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	IS 16635
iii)	UV resistance, strength retained after 500 h exposure, percent	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	IS 13162 (Part 2)
iv)	Chemical resistance, strength retained after 72 h immersion, percent	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	IS 17363
v)	Width, m	← 1 to 6 (tolerance ± 10 mm) →																—
vi)	Roll length, m	← 25 to 200 (tolerance + 1 m with no negative tolerance) →																—

MD : Machine Direction, CD: Cross Direction

NOTES

1 For weathering and chemical degradation having a range of products identical except for mass per area, it is sufficient to subject only the product with the lowest mass per area to the test. The result of the test may be applied for the other products in the range, unless they have been tested separately.

2 Geogrids with intermediate ultimate tensile strength in machine direction other than those specified above may also be manufactured, provided they conform to all the requirements specified in this table.

(Page 5, Table 3) — Substitute the following for the existing table:

Table 3 Requirements of Uniaxial Polyester Geogrids (Type 3, Bonded)

(Clause 6.2)

SI No.	Characteristic	Requirements															Method of Test, Ref to
		300	350	400	500	600	700	800	900	1 000	1 100	1 200	1 300	1 400	1 500	1 600	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(20)
i)	Ultimate tensile strength (kN/m), <i>Min</i> (See Notes 2 and 3)																IS 16635
	a) MD	300	350	400	500	600	700	800	900	1 000	1 100	1 200	1 300	1 400	1 500	1 600	
	b) CD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
ii)	Elongation at designed load in MD and CD, percent	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	≤ 12	IS 16635
iii)	UV resistance, strength retained after 500 h exposure, percent	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	IS 13162 (Part 2)
iv)	Chemical resistance, strength retained after 72 h immersion, percent	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	≥ 70	IS 17363
v)	Width, m	←————— 1 to 6 (Tolerance ± 10 mm) —————→															—
vi)	Roll length, m	←————— 25 to 200 (Tolerance +1 m with no negative tolerance) —————→															—

MD: Machine Direction, CD: Cross Direction

NOTES

1 For weathering and chemical degradation having a range of products identical except for mass per area, it is sufficient to subject only the product with the lowest mass per area to the test. The result of the test may be applied for the other products in the range, unless they have been tested separately.

2 Geogrids with intermediate ultimate tensile strength in machine direction other than those specified above may also be manufactured, provided they conform to all the requirements specified in this table.

3 If required by the buyer, geogrids with ultimate tensile strength ≥ 5 kN/m in the cross-machine direction may also be supplied.