IP CODES

WHAT DO THE TWO DIGITS OF AN IP CODE MEAN?

IP = International Protection (often called "ingress protection"). There are two numbers:

- The **1st number** is protection against **solid objects**: fingers, tools and dust.
- The **2nd number** is protection against **water**.
- **X** means "not tested / not relevant" for that part.

1ST	SOLIDS
0	Not protected
1	Objects ≥ 50 mm (back of hand)
2	Objects ≥ 12.5 mm (**finger**)
3	Objects ≥ 2.5 mm (tools)
4	Objects ≥ 1.0 mm (wire)
5	Dust protected
6	**Dust tight**

2ND	WATER
0	Not protected
1	Vertically dripping
2	Dripping, tilted up to 15°
3	Spraying
4	**Splashing** from any direction
5	**Water jets**
6	**Powerful jets**
7	Temporary immersion
8	Continuous immersion

- **IPX4** = splash-proof (the bathroom zone 1 minimum). **IP2X** = you can't poke a finger in. **IP4X** = you can't poke a 1 mm wire in. Consumer units use IP2X and IP4X in places, which is covered in the 18th Edition.
- **IP66** = dust tight and protected against powerful jets. It's a common rating on **outdoor socket** enclosures, which cost about £10 compared with about £2 for an indoor socket, so you only fit one where it's needed. The Electrician's Guide (5.7.4, p.97) asks for outdoor sockets to be weather resistant (for example, IP54).
- An extra letter can follow, e.g. **IPXXB** (a finger can't reach live parts) or **IPXXD** (a 1 mm wire 100 mm long can't reach them).

On-Site Guide · Appendix L · IP codes (only about a page)

Code of Practice for In-service Inspection & Testing · Appendix 2 · IP codes table · **p.95**

THE CLEAREST IP TABLE — BUT YOU CAN'T TAKE THAT BOOK INTO THE BUILDING REGS EXAM

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