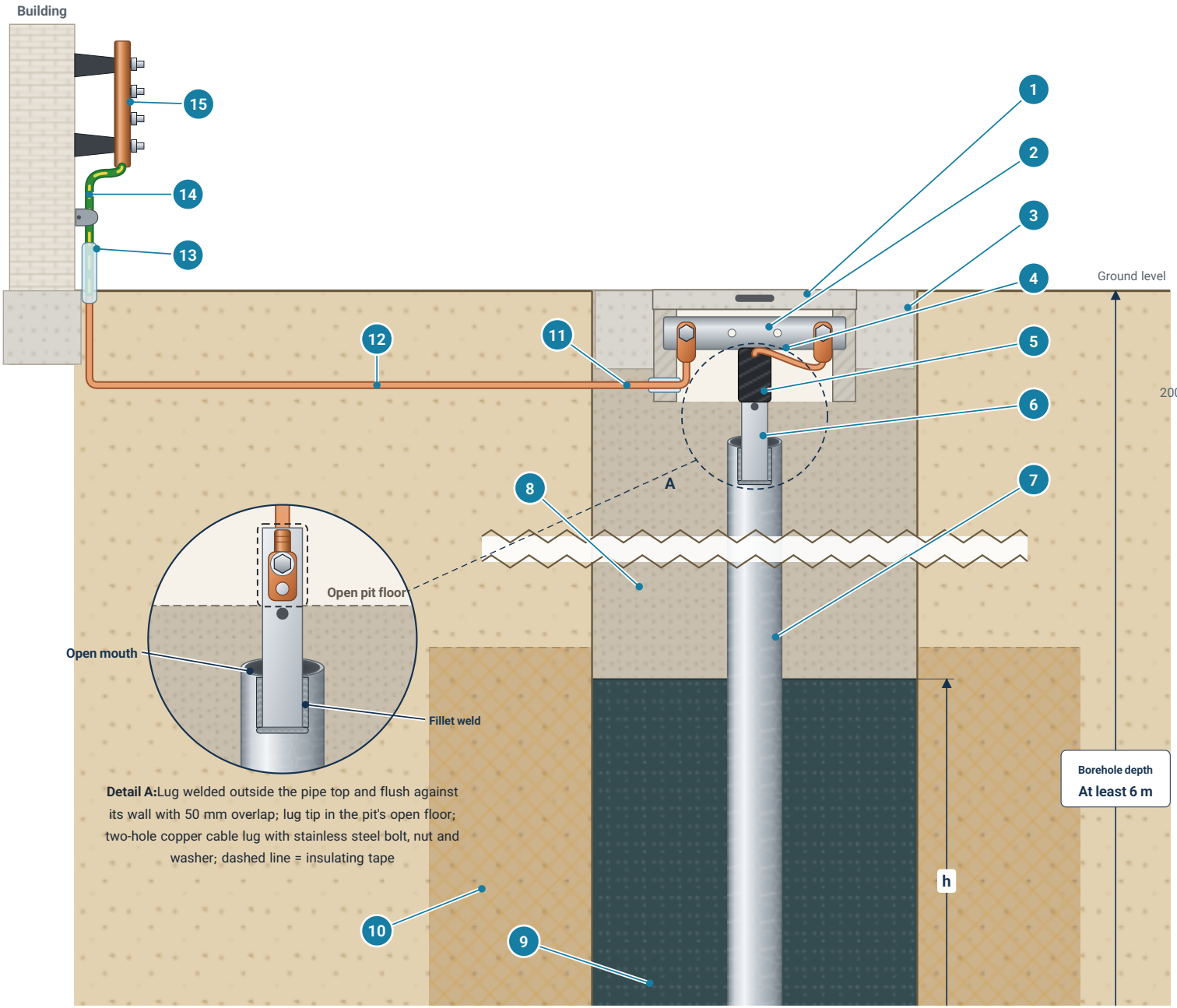
Pipe earth pit installation schematic

The KALOT Group method: pipe in a borehole at least 6 m deep with GIM, concrete earth inspection pit, and conductor to the building earth bar

GALVANIZED & STAINLESS EARTH PIPE · HGV · HSL · HSM 3 / 6 · 3"

KALOT GROUP · TECHNICAL ILLUSTRATION · NOT TO SCALE



Detail A: Lug welded outside the pipe top and flush against its wall with 50 mm overlap; lug tip in the pit's open floor; two-hole copper cable lug with stainless steel bolt, nut and washer; dashed line = insulating tape

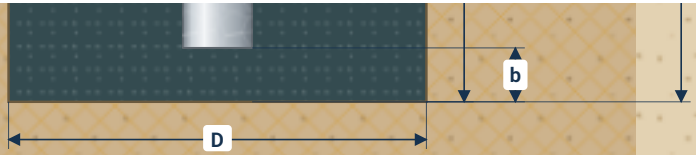
Key

1. **KALOT Group concrete earth inspection pit** — 310 × 310 × 170; a polyethylene pit is also suitable
2. **Pit tinned copper bar** — 300 × 50 × 5 mm, four holes
3. **Concrete around the pit** — Always poured around the pit
4. **Bare copper jumper** — From the bar to the pipe lug, with cable lug
5. **Insulating tape** — Around the cable lug and lug joint, in the pit's open floor
6. **Pipe connection lug** — 200 × 40 × 10; welded outside the pipe, its tip inside the pit
7. **Hot-dip galvanised earth pipe** — 6 m long (HGV 6); top just below the pit floor
8. **Screened soil and clay** — In layers, watered and rammed, up to the pit floor
9. **GIM ground improvement material** — To height h from the borehole floor, with bed b under the pipe
10. **Moist soil layer** — The lower part of the pipe and the GIM lie in this layer
11. **Pit wall sleeve** — Where the conductor leaves the pit
12. **Bare copper conductor in soil** — At shallow depth to the foot of the building wall
13. **Sleeve at the wall base** — Conductor guard where it leaves the soil
14. **Green and yellow conductor** — Above ground only, with wall clips
15. **Earth bar on insulators** — On the building wall

Number of GIM bags (15 kg)

h 4 m	h 3.5 m	h 3.25 m	h 3 m	D (cm)
27	24	22	20	**40**

D Borehole diameter: 40 to 60 cm (50 in the figure)
h GIM height from the borehole floor: 3 to 4 m for a 6 m pipe (3.5 m in the figure)
b GIM bed under the bottom of the pipe: at least 10 cm



42	**37**	34	32	**50**
60	53	49	45	**60**

GIM consumption calculator on the KALOT Group website:
www.kalot.ir/fa/products/gim-calculator

Schematic only, not to scale; D, h and b are shown in the box at the bottom; example: 50 cm borehole with GIM 3.5 m high, 37 bags.

The conductor is bare copper in the soil and inside the pit, and green and yellow only above ground; concrete is always poured around the pit; the pit is concrete or polyethylene.

We keep improving our products; please confirm final dimensions with our experts.

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