

WeWash

Infrastructure

Prerequisite for a successful installation

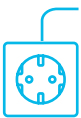
Reception in your laundry room



Mobile phone reception: Required for the operation of the WeWash system. In exceptional cases there may be no reception in the laundry room. WeWash will then provide you with a longer antenna cable to fix the white antenna in an area with reception (e.g. in front of a window, light shaft, external area).

Power supply

Surface mounted socket(s)



Schuko sockets: Every appliance installation site must have a surface-mounted wall socket for humid areas. In addition, one socket is required per laundry room for the Mobile Communication Box. The sockets for the appliances must be accessible to users to be able to disconnect the WeWash Boxes and thus the appliances from the mains in the event of damage. The positions are specified on the following page.



Type F (for all countries except Switzerland (Type 13))

Water supply for washer(s)



Cold water supply: Each washer requires a closing cold water outlet with a 3/4" male thread (flat-sealing). The exact position is specified on the next page.



Waste water connection for washer(s) and dryer(s)

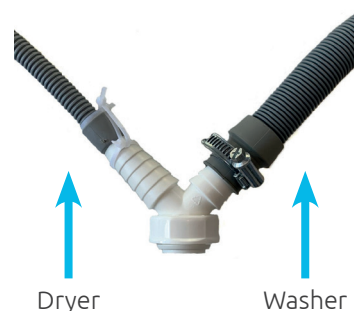


Drainage: The exact position is specified on the next page.

Dryer: The hose nozzle of the dryer has a diameter of 8 mm.

Y connector: Alternative, if there is only one drainage connection for two appliances.

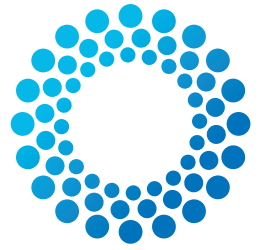
Washer: The hose nozzle of the washer has a diameter of 20 mm.



Environmental conditions



Please ensure sufficient ventilation of the laundry room. At constantly high ambient temperatures (from approx. 27° C), the dryers may not function properly (e.g. significantly longer running times).

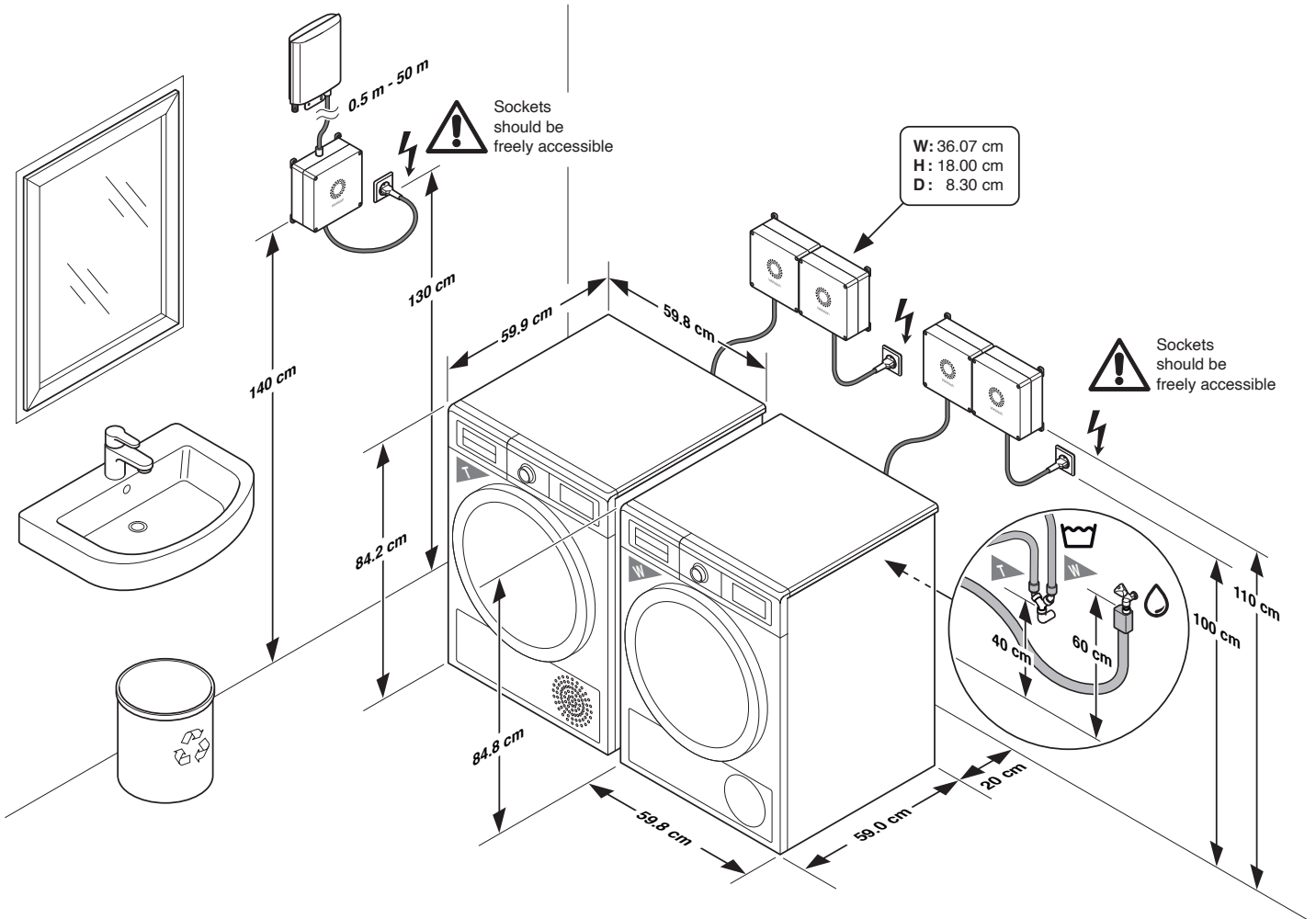


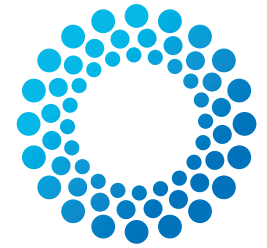
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Infrastructure

Example of standard laundry room

This plan shows the necessary infrastructure with the exact alignment of individual connections, which is necessary for the optimal installation of appliances, Mobile Communication Box and WeWash Boxes.





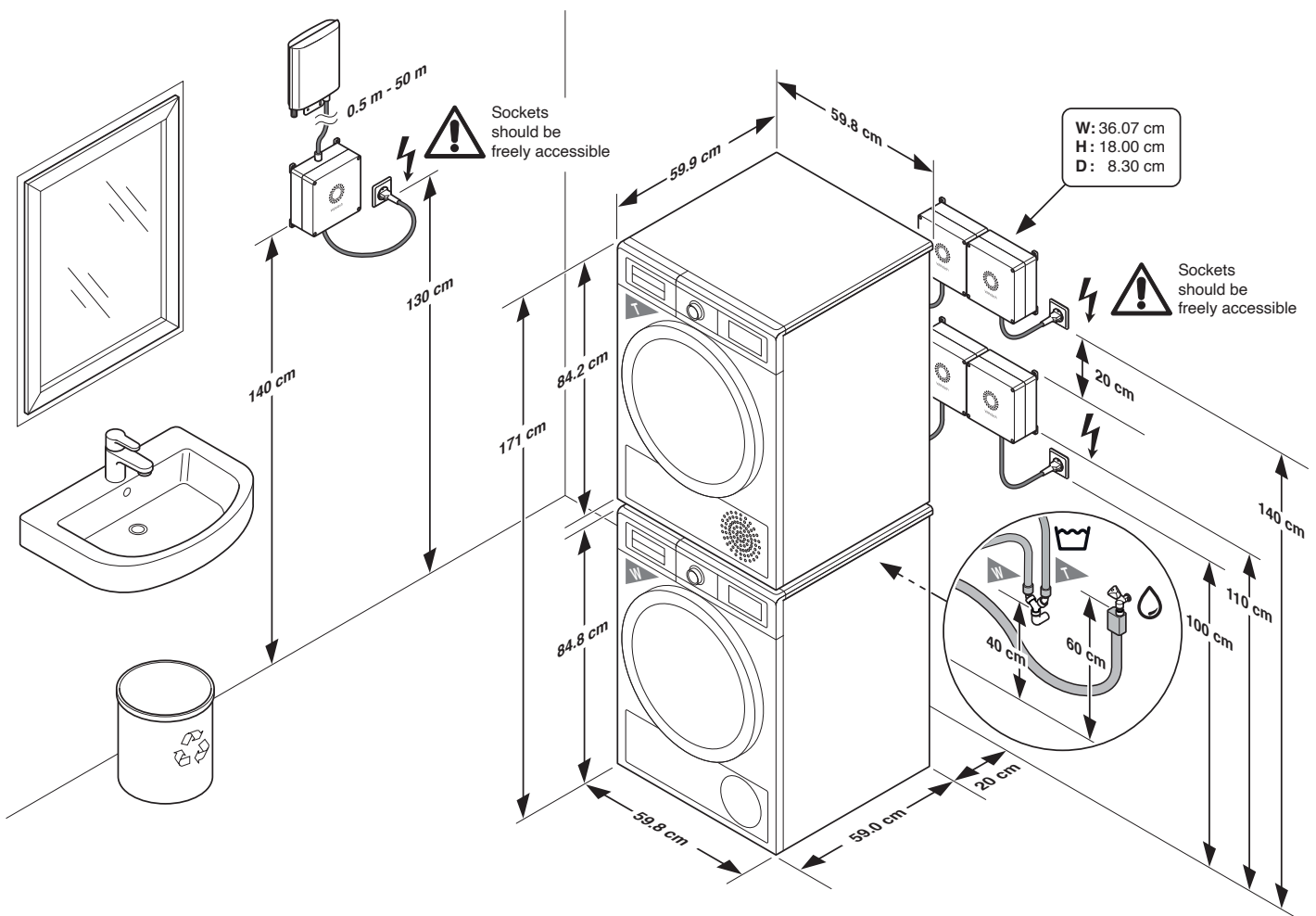
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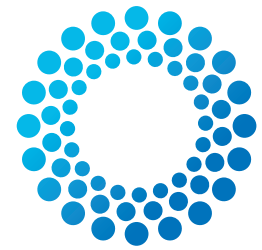
Infrastructure

Example laundry room with stacking (exceptional case)

Please note that the standard laundry room is not shown here. Stacking of appliances is only offered in exceptional cases and only after consultation with WeWash.

This plan shows the necessary infrastructure with the exact alignment of individual connections, which is necessary for the optimal installation of appliances, Mobile Communication Box and WeWash Boxes.





WeWash

Building description

WeWash Care communal laundry room

1. General description of the construction work

Purpose: • Communal laundry room

2. Appliances

Dimensions: • Washer: Depth = 59 cm, Width = 59.8 cm, Height = 84.8 cm
• Dryer: Depth = 59.9 cm, Width = 59.8 cm, Height = 84.2 cm

Accessories: • Each appliance is connected to a WeWash Box.
• Each bundle (appliance and WeWash Box) requires a Schuko socket and water connections. For further specifications, see the section on electricity and water.

3. WeWash Boxes

Dimensions: • Depth: 8.3 cm, Width: 36 cm, Height: 18 cm

Position: • Height: Lower edge of the box at 110 cm above the floor
• Directly next to the appliance installation site
• Alignment: In the centre of the appliance installation site

4. Mobile Communication Box

Dimensions: • Depth: 8.3 cm, Width: 18 cm, Height: 18 cm

Position: • Height: Bottom edge of the box at 140 cm above the floor
• Position:
- Between appliances and window
- As close as possible to a window or light shaft, if available

Accessories: • External antenna: Each Mobile Communication Box is connected to an antenna via an antenna cable
• Antenna cable:
- Standard: Length of the antenna cable = 50 cm cable. Prerequisite: good LTE reception in the laundry room, i.e. reception value rssi \geq -85
- Individual: Length of the antenna cable as required between 3-50 m. Prerequisite: lack of LTE reception in the laundry room, i.e. reception value rssi \leq -85

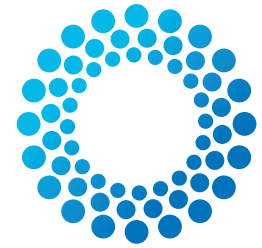
5. LTE Antenna

Dimensions: • Antenna: Depth: 5.5 cm, Width: 18 cm, Height: 24.8 cm

Position: • If LTE reception in the laundry room is good, i.e. reception value rssi \geq -85:
- Installation in the laundry room
- Height: approx. 200 cm above the ground
- Position: Above the top edge of the Mobile Communication Box
• If LTE reception in the laundry room is poor, i.e. reception value rssi \leq -85:
- Installation outside the laundry room
- E.g. light shaft, external façade
- Prerequisite: Location shows good LTE reception, i.e. reception value rssi \geq -85
- The antenna cable must be routed from the laundry room to the antenna position

Attachment: • Wall mounting with 2 screws and dowels

Technical details: • Omnidirectional antenna, see Appendix



WeWash

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WeWash Care communal laundry room

6. Power

Number of connections:

- 1x Schuko socket (230 V) per planned washer / dryer (required for WeWash Box)
- 1x Schuko socket (230 V) per Mobile Communication Box (usually 1x per laundry room)

Specification Schuko sockets:

- Surface-mounted socket
- Suitable for damp locations Type F (exception Switzerland, here Type 13 applies)

Position:

- 1x Socket per WeWash Box (and therefore per washer / dryer)
 - Socket height: 100 cm above the ground
(Laundry room with stacking: the 2nd socket 140 cm above the floor)
 - Position:
 - Directly next to the appliance installation site
 - Alignment: Right-justified at the appliance installation site
- Socket per Mobile Communication Box
 - Socket height: 140 cm above the ground
 - Position:
 - Between appliances and windows
 - Alignment: Right-justified from Mobile Communication Box position

7. Water

Fresh water:

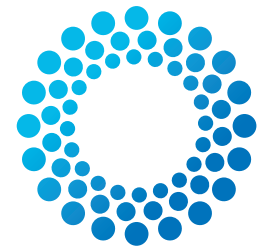
- Per washer
 - Cold water supply
 - Specification:
 - Closable cold water connection
 - 3/4" male thread (flat sealing)
 - Position:
 - 60 cm above the ground
 - Directly next to the appliance installation site

Waste water:

- Per washer
 - Specification for washer hose: Diameter of hose nozzle = 2 cm
 - Position:
 - 40 cm above the ground
 - Directly next to the appliance installation site
- Per dryer
 - Specification for dryer hose: Diameter of hose nozzle = 0.8 cm
 - Position:
 - 40 cm above the ground
 - Directly next to the appliance installation site

8. WLAN for users (optional)

- WLAN: Not necessary to operate WeWash and therefore optional.
- However, convenient for users as the WeWash app only works with the Internet. With Wi-Fi, the users can book the appliances directly in the laundry room by using their mobile phone. Therefore, a Wi-Fi network is recommended for users in the laundry room.



WeWash

Building description

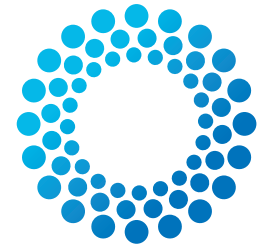
WeWash Care communal laundry room

9. Appendix

Technical data omnidirectional antenna

Manufacturer:	JARFT
Modell:	J4GMB-12-OMOA
Antenna type:	LTE Omnidirectional Antenna (2x2 MIMO)
Power gain:	8dBi @ 800 MHz (GSM, LTE 800) 12dBi @ 1800MHz (UMTS, LTE 1800) 12dBi @ 2600MHz (LTE 2600)
Impedance:	50 Ohm
Frequency range:	791-862 MHz (GSM, LTE 800) 1700 - 2100 MHz (UMTS, LTE 1800) 2500 - 2700 (LTE 2600)
VSWR:	max. 1.8
Grounding:	Direct current grounding (DC ground)
Signal aperture angle:	360° horizontal 20° vertical
Connection:	2 x N socket
Application area:	Indoor and outdoor
Operating temperature:	-30°C to 75°C
Dimensions:	24.8 cm (H) x 18cm (W) x 5.5 cm (D)
Weight:	400 g
Colour:	White





Building description

WeWash Care communal laundry room

Technical data antenna cable

RF 240 LSNH

DOUBLE SCREENED 50 OHM RF COAXIAL CABLE
IN ACCORDANCE TO : IEC 60754-1 IEC 60754-2 IEC 61034-2



Class CPR **E_{ca}**

CU PEE LAS CS LSZH
ø 1,40 mm ø 3,80 mm ø 3,90 mm ø 4,40 mm ø 6,10 mm



|| A || B || C || D || E ||

MECHANICAL DATA

A	INNER CONDUCTOR	PLAIN COPPER	.....	ø 1,40 mm
B	DIELECTRIC	FOAM POLYETHYLENE	.....	ø 3,80 ± 0,10 mm
C	SHIELD	ALL + PET + ALL ADHESIVE TAPE		h. 15 mm
		- COVERAGE	.....	100%
D	BRAID	TINNED COPPER	.....	112 x 0,12 mm
		- COVERAGE	.....	80%
E	SHEATH	FLAME RETARDANT NON-CORROSIVE THERMOPLASTIC FREE OF HALOGENS		ø 6,10 ± 0,10 mm
	- COLOUR	BLACK - RAL 9004		
	- PRINTING	RF 240 LTA-ZH 50 OHM LOW LOSS CABLE LSZH 1,40 / 3,80 / 6,10		
		MADE IN ITALY CE 56 WEEK/YEAR EN 50575:2014 + A1:2016 Eca		

MINIMUM BENDING RADIUS (mm)

- SINGLE ø EXTERNAL X 5
- REPEATED ø EXTERNAL X 10

TEMPERATURE RANGE -30 °C / +70 °C

CABLE WEIGHT (Kg/Km)

- COPPER 25,9
- PLASTIC 26,0
- TOTAL 53,7

ELECTRICAL PROPERTIES at 20°C

IMPEDANCE	50 ± 3 Ohm	RESISTANCE	
		- INNER CONDUCT.	11,5 Ohm/Km
CAPACITANCE	80 pF/m	- BRAID	14,5 Ohm/Km
		TENSION	
VELOCITY RATIO	84%	- SHEATH	4,5 kV
		SPARK TESTING	

ATTENUATIONS dB/100 m.

		dB	W
5	MHz	1,9	3536
10	MHz	2,7	2500
30	MHz	4,4	1443
50	MHz	5,6	1118
150	MHz	9,5	645
220	MHz	11,7	533

MAX. POWER RATING W

		dB	W
450	MHz	17,4	373
600	MHz	20,2	323
800	MHz	23,5	280
900	MHz	24,7	264
1000	MHz	26,4	250
1500	MHz	32,9	204

		dB	W
1800	MHz	36,4	186
2000	MHz	39,1	177
2500	MHz	43,8	158
3000	MHz	48,6	144
5200	MHz	67,4	110
5800	MHz	71,8	104

STRUCTURAL RETURN LOSS dB

30 ÷ 450	MHz	>25
450 ÷ 1000	MHz	>20
1000 ÷ 2000	MHz	>17

SCREENING EFFECTIVENESS dB

2000 ÷ 3000	MHz	>16	100 ÷ 900	MHz	>95
3000 ÷ 4000	MHz	>15	900 ÷ 2000	MHz	>85
4000 ÷ 5800	MHz	>11	2000 ÷ 3000	MHz	>75

The producer reserves himself to make modification on the item without any notice.