

Linderud Borettslag II

Technical facilities in the apartments

- Precautions and Guidelines -

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Purpose:

This guide describes the technical installations in the apartments in Linderud Borettslag II. It should be read thoroughly by new residents and **must** be read before starting any renovation work.

The description is precise for 3-room apartments, while 2- and 1-bedroom apartments on the 4th and 8th floors will differ in some respects.

The distribution of maintenance responsibilities for the unit owner and the Housing Cooperative is defined in §5 and §6 of the Statutes, and should also be read!

1. Bathrooms

1.1 Renovation - Wet room standards

Changed regulations for work in bathrooms came into force in July 2010.

When renovating, the building industry's wet room standard BVN must be followed:

- An approved membrane must be installed in floors and walls.
This is at the shareholder's expense.
- The work must be carried out by a craftsman holding a wet room certificate approved by the City of Oslo.
- Bathroom renovations must be reported in advance to the Board of the Housing Cooperative to ensure professional execution

1.2 Replacement of floor drain

Our drains and sewage pipes were renewed using the Dakki method in 2010, coating the floor drain and sewage pipes internally with epoxy. This complicates replacement of the floor drains.

In consultation with people from Dakki and others, our plumber has now found a way to replace Dakki-treated drains. Price (2014): 11.500 kr. + MVA.

- Nobody is permitted to replace the floor drain on their own, because special expertise is required. The Housing Cooperative's regular plumber will assess the need for replacement and, if required, perform the replacement.

Contact: Juuls Rørservice AS, www.juuls.no, tel. 22720800

Please allow for up to 2 weeks from order to start of work.

- If replacement is required, LBR2 will pay the entire cost according to §6.3 of the Statutes.
- If replacement is not required but still wanted, LBR2 will pay half of the cost.

1.3 Cleaning of floor drains

- The shareholder is responsible for clearing the bathroom floor drain of hair and dirt so that water from bathtub, shower and washbasin does not overflow on emptying (Rules of Order §3).

2. Ventilation – Air extraction

2.1 Ventilation in the apartments

- a) Fresh air inlet vents are located at the top of some of the windows, as well as on the outer wall of the kitchen and in both bedrooms. In addition, windows can of course be left ajar.
- b) Vents to the common air extraction shafts are located in the kitchen and bathroom.

It is strongly discouraged to close all fresh air vents, as the extraction will then create negative pressure in the apartments and moisture will not be transported out.

2.2 Air extraction from bathroom, kitchen, cooker, tumble dryer etc.

The Rules of Order §2 states:

”It is not permitted to connect kitchen/bathroom fans, tumble dryers, etc. to the apartment's exhaust ducts or against the exterior wall.”

The reason is that multiple fans against the common exhaust ducts will create over-pressure in the ducts, so that impure air will blow out of vents in other flats.

Kitchen fans require (charcoal) filters that purify the air before it is released back into the room. The flow of air from fresh air inlets to exhaust vents will bring the used air with it.

3. Water and wastewater

3-room apartments have two pipe shafts:

3.1 Kitchen

- a) The pipe shaft is located next to the air extraction shaft, on the living room side. In the living room, there is a service hatch in the corner by the kitchen for access to the pipes. The shaft also contains cables for the TV system and fibre optic network.
- b) Access to this hatch must not be blocked. If the wall is covered by panelling, make an outer hatch of removable panelling to permit access for maintenance.
- c) Stopcocks and hot water meters are usually located under the kitchen worktop, but in some cases these are behind the service hatch instead.

3.2 Bathroom

- a) The pipe shaft also functions as air extraction shaft. There is a service hatch in the entrance hall. Behind the hatch are stopcocks for the bathroom and a hot water meter for the bathroom. Access to the hatch must not be blocked.
- b) The bathroom has an exhaust vent towards the shaft.

3.3 Others

- a) Encased drain pipe in the entrance hall, towards the elevator shaft (not in apartments at the ends of the buildings).
- b) Drain pipe from building's roof, and a pipe to obsolete fire hoses in the stairwells. These run through the west-side bedrooms, in every other apartment. The pipes are encased inside the original wardrobes in the corner closest to the staircase.

4. Heating and Metering

4.1 Radiators

- a) The apartments have radiators in the living room, kitchen, east bedroom and west bedroom.
- b) Each radiator has a meter that reports consumption via radio signals. Consumption can be monitored at <http://www.istaonline.no> by logging in with the assigned ID. The meters can also be read manually using a push button and display (instructions can be downloaded from www.Linderudbo.no/L2/)
- c) The radiators previously had manual control valves. In the autumn of 2019, thermostatic valves were installed in all accessible apartments, and in the remaining apartments in the summer of 2020.
The scale * 1 2...3...4 5 represents temperature, where 3 corresponds to approx. 20 degrees. The radiator will switch on when it is colder than set, and switch off (and become cold) when the desired temperature has been reached. Use a thermometer to check the air temperature in the room, and fine-tune the thermostat to the desired heat.
ATTENTION: Even in the lowest position (*), the radiator will switch on if the room temperature drops to 0 degrees, to prevent the water in the radiator from freezing and thereby causing leaks.
- d) Each radiator has a “bleed valve” for letting trapped air escape. Airing should be done if the radiator heats poorly or if you hear the sound of running water inside. A special square key is inserted into the end of the valve and turned. Some water will also come out, so hold a can or bottle underneath while the air escapes. NOTE! Do not unscrew the valve itself from the radiator!
A key for the vent (5 mm square hole) may be purchased from e.g. Jernia or Clas Ohlsson. (Norwegian: «Radiator luftnøkkel»)
- e) Some shareholders have chosen to remove one or more radiators.
 - The Board shall be notified in advance before removal, so that heat meters can be de-registered.
 - If radiators are to be reinstalled at a later date, the shareholders must pay for this themselves, even after any change of ownership.In the event of sale, dismantled radiators constitute a defect.
- f) Radiators can be dismantled during refurbishment.
The supply and outlet valves must be closed first, and kept closed while the radiator is dismantled. The outlet valve has a lid that must be unscrewed before the valve can be operated with a hex “Unbraco” key. The water in the radiator must be collected when the couplings are unscrewed.
 - If in doubt about the procedure, contact the caretaker.
- g) If the shareholder wishes to replace the radiator, e.g. in connection with major refurbishment, contact the caretaker.
 - A type approved by the Housing Cooperative must be installed.
 - After replacement, the heat meter must be installed by the ISTA company.

4.2 Hot water

- The hot water inlets for kitchens and bathrooms have volume meters that report consumption via radio signals. The meters also have counters that can be read manually.

5. Electrical supply

- a) The fuse box is recessed in the wall outside the apartment's entrance door.
- b) The unit owner is responsible for electrical installations from and including the apartment's fuse box/main fuse, including cables and wires, sockets, switches, heating cables and appliances.
- c) Common risers in the stairwells were originally dimensioned for a 25A main fuse for each apartment. Some shareholders wanted a higher current, specifically for induction cookers in kitchens. The common risers have been upgraded, and **any apartment may now have a maximum of 40A main fuse**.
Upgrading the apartment's fuses, as well as the cabling to the kitchen, must be ordered and paid for by the shareholder (see §5.1e of the Statutes).

6. TV cable system

- a) Each apartment has a TV outlet box, with connectors labelled DATA, TV and RADIO. The box is usually located on the long wall in the living room, approx. 2 metres from the balcony window (DATA and RADIO are no longer in use: We have a fibre network, and the FM broadcast network has been discontinued).
- b) The Housing Cooperative's maintenance responsibility includes the TV outlet box and its supply cable.
- c) The shareholder is responsible for cables between the apartment's outlet and their own appliances, including any branches to other rooms in the apartment.
- d) The old TV and RADIO outlet (recessed in the wall) was phased out in 2009. It can be removed if desired. On the 6th floor, the cable to the old outlet from the balcony can also be removed.

6.1 Operational responsibility

The Housing Cooperative has a maintenance and operation agreement with ATMcom AS for the TV cable system and the fibre network for Internet, including operation and troubleshooting. Problem reporting: e-mail, telephone
- See our website www.Linderudbo.no/L2/, as well as notices in the lobbies.

6.2 TV joint agreement - TV decoder

- a) Since 2019-04, the Housing Cooperative has a joint agreement for the "Start 30" TV package from Telia (previously GET).
- b) Through the joint agreement, each apartment is entitled to one decoder "Telia TV BoX". The decoder is the property of Telia, and the shareholder is responsible for it. If an apartment is sold, the decoder can be passed on to the new shareholder, provided this is reported to the Telia Customer Service.
- c) It is possible to opt out of the joint agreement for TV on an annual basis. See the form with conditions at http://linderudbo.no/TV/TV_Fellesavtale.html

7. Fibre network for Internet access

- a) In 2016, the Housing Cooperative installed a **fibre network** with four fibres to each apartment. One fibre is used for Internet access, and a fibre switch is installed in each apartment. The three unused fibres are available for future services.

- b) The Housing Cooperative has a contract with ATMcom AS for the provision of Internet access, currently including 250 Mb/s speed (symmetrical) to all apartments. Payment is part of the monthly joint expenses, and is specified on the invoices.
- c) Higher speeds can be ordered from ATMcom, in which case the shareholder will receive invoices for the additional cost directly from ATMcom.
- d) The switches to the fibre network in the apartments are fastened on the wall and sealed. The cleaning procedure required for connection of fibre optics implies that the shareholder is not permitted to open the unit and will lose the warranty if the seal is broken. If the fibre cable comes loose from the skirting board, it must not be cut, stretched or pulled out of the fibre box.
The shareholder must pay for assistance from a fibre company - also when moving the box during renovation. The price for fibre re-termination was NOK 3,600 in December 2022.

8. Telephone cable (obsolete)

- a) The cable enters the apartments through a pipe opening in the ceiling above the entrance door on the side closest to the elevator. It was used for landline telephone, alarm system, and (historically) Internet via ADSL/VDSL.
- b) Cabling and appliances inside the apartment are the unit owner's responsibility.
- c) **NOTE! This copper cable network was officially discontinued late 2022.**

9. Entry phone and doorbell system

- a) Outside the doors in the entrance hall, there is a panel with buttons for calling the apartments' door telephones. Each apartment has a door telephone inside the entrance door, with a button marked with a key symbol to open the outside door.
- b) The doorbell button outside each apartment's entrance door is connected to the "ding-dong" doorbell inside.
NOTE! These doorbells have batteries that must be replaced when needed.

10. Balcony

Instructions for use from suppliers can be downloaded from www.Linderudbo.no/L2/.

10.1 Balcony door

This is a raise/slide door. To be able to slide the door sideways, it must first be raised:

- a) Opening: Turn the lever on the inside so that it points downwards. The door can now be pushed sideways.
- b) Closing: Push the door sideways until the opening is closed, then turn the lever on the inside so that it points upwards. The door is now maximally sealed.
If you do not lower the door after closing, there will be a draft.
- c) Maintenance: The metal rail on which the door slides should be kept clean. Remove any slag from oil etc. with white spirit. A clean rail also results in less noise when the door is moved.

10.2 Glazing

The lower part of the glass is fixed, while the upper part has 6 panes in the front that can be pushed all the way to one side and rotated 90° for a full opening. In addition, the side window and one front window have fittings for airing adjustment.

NOTE! The windows must be secured/locked so that they are not damaged by wind.

10.3 Rain, water and drainage

- a) There is a grate in the floor with a drain approx. 1 metre in from the windows. This should not be covered by carpets etc. When dirt and debris accumulates under the grate, it can be lifted up so that the gutter underneath can be cleaned.
- b) In the event of rain and wind against the balcony, some water will get through the cracks between the panes. Below the panes there is a gutter that collects this water, but this does not have a drain by default. It is recommended to install a thin hose from the gutter to the grating in the floor.
- c) During rain and wind, a design flaw allows water to enter cavities in the structure and drip from the fittings in the separation between the original concrete roof and the protruding part of the balcony. Unfortunately, there is no known solution to completely avoid this.

10.4 Awning

The awning provides sun protection on the outside of the glass. Up/down is controlled by an electrical switch mounted just inside the sliding balcony door.

NOTE! During strong winds, the awning must be raised to avoid damage.

Maintenance responsibility: The shareholder shall pay for any repairs.

11. Elevators

All the Housing Cooperative's 12 elevators were replaced between 2016-09 and 2018-04. The manufacturer is Schindler.

- Maximum capacity: 900kg. Speed: 1.6 m/s. Automatic sliding doors on all floors.
- There is an alarm in the cabin with voice connection to a 24-hour call centre.
- Each staircase has an elevator with stops in the basement (-1), exit floor (0) and residential floors 1 to 13. In the centre staircase of each apartment block, the elevator goes up to the roof (14), requiring a key.
- During moving jobs, the elevator may be operated manually. Contact the caretaker to borrow a key for this.
- **Avoid** dirt, gravel, etc. being deposited in the track for the sliding doors. Such could stop the elevator.

12. Fire hose and smoke detectors

Installed in each apartment is:

- One "RedBox" flat/wound fire hose, under the kitchen sink or in the bathroom. The hose shall be permanently connected to the dedicated tap. Instructions for use are on the lid.

- Two smoke/fire detectors, one optical and one ionic. These are not connected to any network and so provide only a local warning. The detectors are normally equipped with a long-term lithium battery, with a typical service life of 7 years. Defective smoke detectors may be exchanged for new units, contact the caretaker.

NOTE: In some models, the batteries are permanently installed from the factory. In the event of a fault when the alarms beep continuously, the battery can be disconnected by removing the lid and disconnecting a small black strap between two pins.

13. References / Links

The Housing Cooperative's website: <http://linderudbo.no>

BVN: Byggebransjens våtromsnorm (The building industry's wet room standard)

→ <http://www.byggforsk.no> (search for «våtrom»)

Fagrådet for våtrom: (Industrial council for wet rooms)

→ <http://www.ffv.no/>

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