

Break-in Protection G45

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1 Purpose of the regulation, and the break-in protection levels

This regulation further specifies the structural break-in protection requirements set out in the policy wordings, and provides solution models for complying with the break-in protection requirement.

The level of break-in protection required in your contract (policy) of insurance is Level 1, unless the protection level stated for the insured subject matter in the policy schedule is 2 or 3.

The Level 1 requirements apply to all levels, unless another requirement in respect of the same matter is given for Level 2 or 3. The Level 2 requirements also apply to Level 3, unless another requirement in respect of the same matter is given for Level 3.



Level 1 applies universally.

Level 2 applies to premises for which the break-in protection level stated in the policy schedule is 2. These are additional requirements to Level 1.

Level 3 applies to premises for which the break-in protection level stated in the policy schedule is 3. These are additional requirements to the requirements of Levels 1 and 2.

2 Break-in protection – general concepts and technical definitions

Break-in

Intrusion into a structurally protected and locked storage space of the property by damaging the structures or locks of the space.

Storage space

Any space surrounded by fixed structures where the insured property is kept. Structures and constructions that are external to a building, such as balconies, ports, canopies, verandahs and loading ramps, are not storage spaces.

Storage space walls, floor and ceiling

Structures surrounding the storage space, that may be exterior surfaces of the building or walls, floors or ceilings that are adjacent to other interior spaces.

Façade windows

Façade windows mean the windows on the customer entrance side of the building or commercial premises.

Doors, windows and other openings

Doors, windows and other openings in the walls, floor and ceiling of the storage space.

Key

Any mechanical, electronic or biometric identifier that controls the lock of a door or the locking system of the premises.

Lock

Any device used for fastening, closing or preventing use, that can be set to open only with the appropriate identifier or control device.

Locking

The system made up of locks and their appropriate identifiers that is used to allow persons, or restrict their, access to or movement on the premises.

Door lock

Any lock with a locking plate fitted integrally on a door and tested according to SFS 7020 into either Class 1 or 2 (Figure 18).

Security lock

Any lock with a locking plate fitted integrally on a door and tested according to SFS 7020 into either Class 3 or 4 (Figure 19).

Latch

The moving lock part that locks the door against the locking plate on the door frame.

Locking plate

A part of an integrally fitted lock, that is fixed with screws on the frame.

Cover plate

A steel or brass T-profile with a length of at least 30 cm and a thickness of 3 mm installed at the lock of a non-rebated door (Figure 8).

Tolerance between door and frame

The space between the door leaf and the frame at the lock (Figure 7).

Hinge bolt

A bolt made of steel with a diameter of at least 6 mm and a projection of at least 10 mm. The bolt may be part of the hinge or, if retrofitted, it is fixed to the frame through the hinge (Figures 5 and 6).

Padlock

Padlocks are tested according to SFS 7020 and listed into Classes 1, 2, 3, or 4.

Padlock fixings

Parts made of steel for fixing padlocks, installed into the frame and the door by welding, screwing or bolting in such a way that they cannot be removed from the outside without breaking them.

Steel bar

A locking device, made of a steel pipe profile or flat steel and fitted with padlock fixings, for doors, double doors or shield plates. The bar must be fastened or locked at both ends onto the wall or the frame. The bar can be made of at least:

- a steel pipe profile of 50x30x3 mm³
- flat steel of 12x50 mm².

Panic bolt

A bolt device that closes the inactive leaf of a door and can be opened with a lever on the inside of the door.

Shock-resistant glass

Glass tested according to SFS-EN 356 into Classes P1A–P5A.

High-impact glass

Glass tested according to SFS-EN 356 into Classes P6B–P8B.

Roller grille

Any grille tested according to SFS-EN 1627 and listed into Classes 2-6.

Window shutter

- On the inside, must be made of 12 mm plywood or 1.5 mm sheet metal
- On the outside, must be made of 18 mm plywood or 2.5 mm sheet metal.

Hatch shutter

Must be made of 18 mm plywood or 2.5 mm sheet metal.

Steel grilles

- Any welded grille in which the steel cross-sectional area is at least 110 mm² (round bar \varnothing 12 mm), the space between steel parts no more than 120 mm and the span 350 mm (Figure 1).
- A sliding lattice grille is a steel grille that can be retracted.
- Decorative steel grilles are welded steel grilles in which the steel cross-sectional area must be at least 75 mm² (round bar \varnothing 10 mm) and with an opening size of no more than 400 cm² (Figure 3).

Steel mesh

Steel meshes must be meshes fastened by welding to a steel frame and having a cross-sectional area of at least 10 mm² and an opening size of no more than 22 cm² (Figure 2).

High-impact door

Any door tested according to SFS-EN 1627 into Classes 2-6.

3 Crime prevention, and the surroundings

Crime prevention should be taken into account when designing a building and its surroundings. The opportunities for crime can be influenced by designing safe, maintainable structures and constructions, and by ensuring their upkeep and repair. The purpose of use of different areas and the rights of access to them can be indicated by the design and implementation of the building's surroundings. Areas intended for different uses should be separated off from each other by fences, bushes, clear signage, lighting, different surface finishes or other architectural means.

The placing of buildings and surface structures should promote natural monitoring. They should not act as visual obstructions to detecting persons moving about in the area. Natural monitoring means monitoring by company staff and observation by casual passers-by.

4 Structural break-in protection

4.1 Storage place walls, floor and ceiling

Level 1

The construction is to be of such strength and built in such a way that it is not possible to force an entry into the space without using tools to break the construction.

It must not be possible to remove the construction or any part of it from the outside without breaking it.

Partition wall constructions must extend from floor to ceiling. If a partition wall construction does not extend all the way up to the ceiling, the top side of the suspended ceiling may be protected with a grille or mesh (Figures 1, 2 and 3).

Level 2

If a partition wall construction does not extend all the way up to the ceiling, the top side of the suspended ceiling must be protected with a grille.

Structurally light walls, such as plasterboard walls and profiled metal sheeting walls, must be reinforced with either 12 mm plywood or a 1.0 mm metal sheet on the storage-space side, up to a height of 4 metres from the floor or other standing level.

Glass structures, such as glass walls and movable glass walls, must be of at least Class P4A shock-resistant glass, or they must be protected with:

- a roller grille on the outside of the glass, protection class 3
- a roller grille on the inside of the glass, protection class 2, or
- a steel grille or mesh (Figures 1, 2 and 3).

Level 3

Structurally light walls must be reinforced on both sides of the wall with either 12 mm plywood or a 1.0 mm metal sheet, up to a height of 4 metres from the floor or other standing level.

Glass structures must be of at least Class P6B break-in resistant glass, or alternatively the glass must be protected with:

- a roller grille on the outside of the glass, protection class 4
- a roller grille on the inside of the glass, protection class 3, or
- a steel grille or mesh (Figures 1, 2 and 3).

4.2 Doors, hinges and frames

Levels 1, 2 and 3

The construction of the door must be equivalent in strength to the wall structure.

The following requirements apply to door constructions:

- The frame is to be wedged into the structures at the locks and hinges (Figure 4).
- Hinge bolts are to be fitted on the hinge side of the frame at the hinges (Figures 5 and 6).
- The tolerance between door and frame on the locking side must not exceed 5 mm (Figure 7).
- In a glazed door, the glass is to be fixed in such a way that it cannot be removed from the outside without breaking it.

In a non-rebated door, the door lock is to be protected with a cover plate (Figure 8).

4.3 Windows, door glass panes, and openings

Level 1

Window panes must be fixed and the windows closed in such a way that they cannot be removed or opened from the outside without breaking them.

Level 2

The windows, door glass panes and skylights on the external wall of the building must be of Class P4A shock-resistant glass, or they must be protected with a fixed or locked:

- roller grille on the outside of the glass, protection class 3
- roller grille on the inside of the glass, protection class 2,
- steel grille or mesh (Figures 1, 2 and 3), or
- hatch shutter.

A Class 2 high-impact door satisfies the above requirements for door glass panes.

Other openings, such as smoke extraction and air intake vents, must be protected by a fixed or locked steel grille.

The protection requirement does not apply to any window or opening that is at a height of at least 4 metres from the ground or other standing level.

If the premises are equipped with a burglar alarm system that satisfies the requirements laid down in the 'Murtohälytysjärjestelmät ja -palvelut' guideline published by Finance Finland, the windows may be protected with a combination of structural protection methods and the alarm system.

Level 3

All windows, door glass panes and skylights must be of Class P6B high-impact glass, or they must be protected with a fixed or locked:

- roller grille on the outside of the glass, protection class 4
- roller grille on the inside of the glass, protection class 3,
- steel grille or mesh (Figures 1, 2 and 3), or
- hatch shutter.

A Class 3 high-impact door satisfies the above requirements for door glass panes.

The protection of display windows must cover the entire width of the window, and it must extend to a height of at least 2 metres from the ground or other standing level.

When protecting a display window with some other solution than high-impact glass, the opening size of the protective structure used must be chosen to reflect the size of the items on display in such a manner that it is not possible to pass any items through the protective structure without breaking it.

A burglar alarm system installed at the premises does not replace the structural protection methods.

5 Locking

5.1 General

The doors leading to and from the space must be locked with tested and classified door and security locks.

Instead of a door lock, a Class 1 padlock can be used, and instead of a security lock, a Class 3 padlock can be used.

When there are no people in the space, the locks must be double-locked and the panic bolt on double doors is to be locked. A door is double-locked when the latch is immobilised in the locked position.

Level 1

When locking a door with padlocks, they must be:

- on the outside, at least Class 2 including the fixings
- on the inside, at least Class 1 including the fixings.

Levels 2 and 3

When locking a door with padlocks, they must be:

- on the outside, at least Class 3 including the fixings
- on the inside, at least Class 2 including the fixings.

5.2 Locking of doors

Single-leaf doors (Figures 9A, 9B and 10)

Level 1

A solid door must be locked with a door lock.

Profile, glass and glass-paned doors must be locked with a security lock. The distance between the latches of locks in a glass door may be more than 40 cm.

Levels 2 and 3

All doors must be locked with a door lock and a security lock.

Double doors (Figures 11, 12 and 13)

Levels 1, 2 and 3

The active leaf of double doors must be locked in the same manner as single-leaf doors of the same protection level. The inactive leaf must be closed with a panic bolt, which is to be locked with a padlock of at least Class 1 or in some other equivalent manner that prevents the panic bolt from being used.

Double doors may also be locked with a door lock and a steel bar locked with a padlock, or with internal bolts and a padlock.

Roll-up, up-and-over, folding and sliding doors

Level 1

Roll-up and up-and-over doors must be locked with an internal bolt and a padlock, or from the outside with two padlocks. The bolt and the padlock must be located on the opposite sides of the door.

Folding and sliding doors must be locked with a padlock.

Levels 2 and 3

Roll-up, up-and-over, folding and sliding doors must be locked with two padlocks (Figure 14 and 15).

Moveable glass walls and sliding glass doors (Figure 16)

Level 1

Movable glass walls and sliding glass doors must be locked with at least one security lock.

Levels 2 and 3

Movable glass walls and sliding glass doors must be locked with two locks. The distance between the latches may be more than 40 cm.

Swing doors (Figure 17)

Levels 1, 2 and 3

Swing doors must be locked in the same manner as double doors, or:

- both leaves of the door are to be locked with a security lock at the top and at the bottom, or
- one door leaf is to be locked with a security lock at the top and at the bottom, and the other leaf is to be locked to it in the same manner as single-leaf doors.

5.3 Locking of grilles

Openable grilles and roller grilles must be locked with two locks, in the same manner as roll-up and folding doors.

6 Key safety

Companies and organisations must have a person responsible for locking, whose tasks include user induction and maintaining the users' key instructions document.

In addition, his or her tasks also include:

- maintaining the registry of keys
- supervising the handover, returns and loans of keys
- rekeying, and
- ordering extra keys.

The keys must be stored in the manner set out in the key-safety instructions document, and they must not be marked in a way allowing them to be linked to the site, building or premises. Key deposit cylinders embedded in the exterior wall must only store separate keys to doors leading to electrical, telephone and other similar technical facilities. The master key must never be stored in such key deposit cylinders.

If a key is lost or comes into the unauthorised possession of an outsider, it must immediately be established whether the key may be misused. In the case of immediate risk of loss or damage, steps must be taken to prevent further damage.

Further information: G47 Key Safety, technical regulation

7 Fastening of movable property

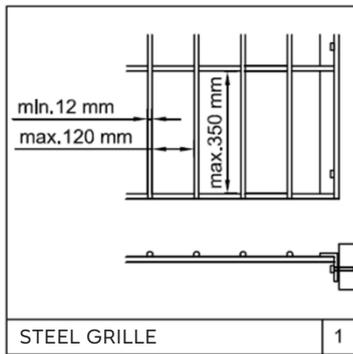
Unless otherwise indicated in the policy schedule, movable property is fastened in a LocalTapiola-approved manner when the property is fastened to a strong fixed structure or construction with a 10 mm thick or thicker steel chain or cable that is locked with an approved Class 3 padlock, or in some other manner that provides an equivalent level of protection.

8 Approved products

A separate list of the approved locks, protection devices and materials can be found at www.vahingontorjunta.fi.

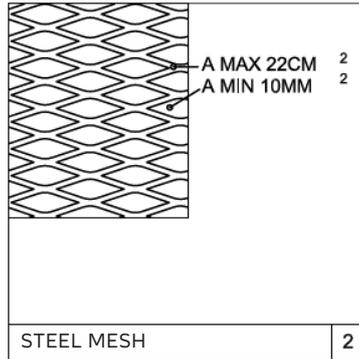
For further instructions and guidance on structural protection, please consult a locksmith or Finance Finland.

9 Figures (1-19)



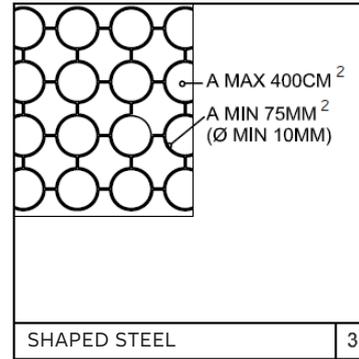
STEEL GRILLE

1



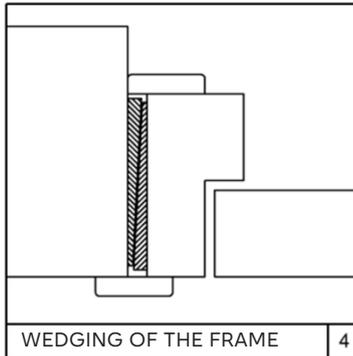
STEEL MESH

2



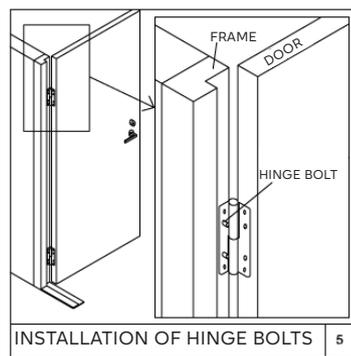
SHAPED STEEL

3



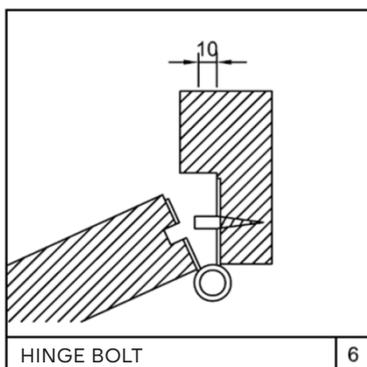
WEDGING OF THE FRAME

4



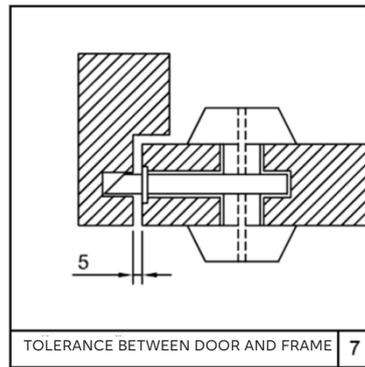
INSTALLATION OF HINGE BOLTS

5



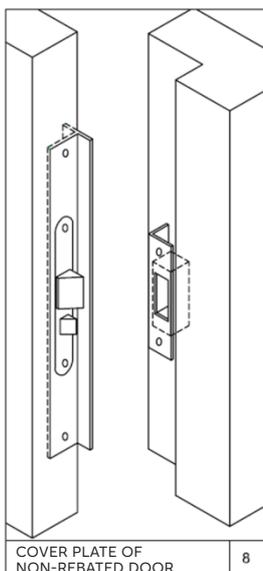
HINGE BOLT

6



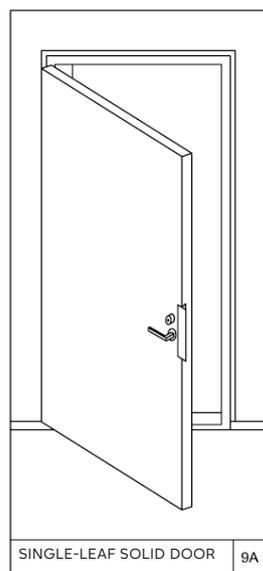
TOLERANCE BETWEEN DOOR AND FRAME

7



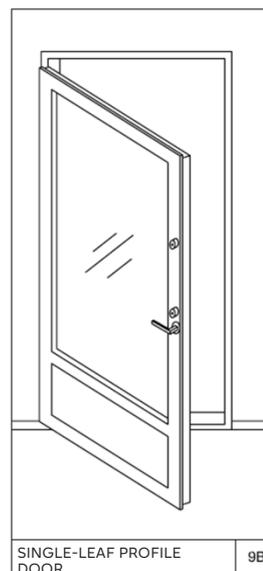
COVER PLATE OF
NON-REBATED DOOR

8



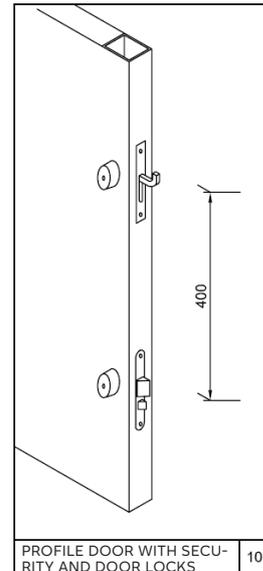
SINGLE-LEAF SOLID DOOR

9A



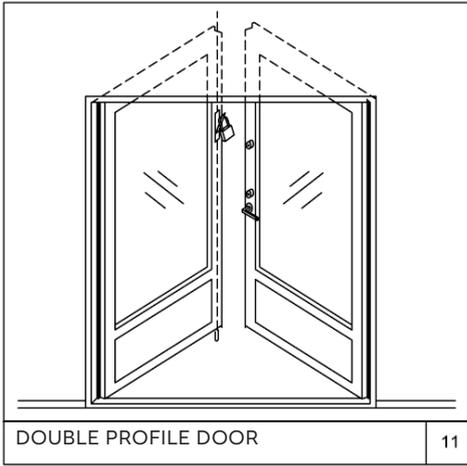
SINGLE-LEAF PROFILE
DOOR

9B

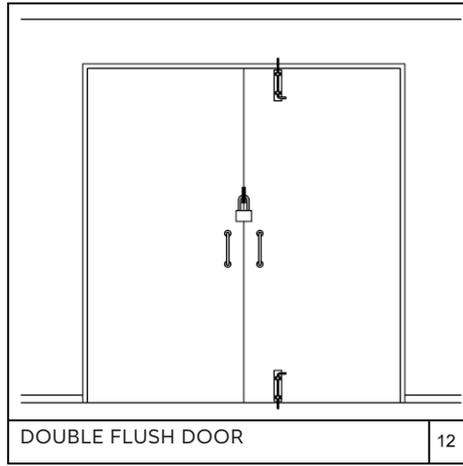


PROFILE DOOR WITH SECURITY
AND DOOR LOCKS

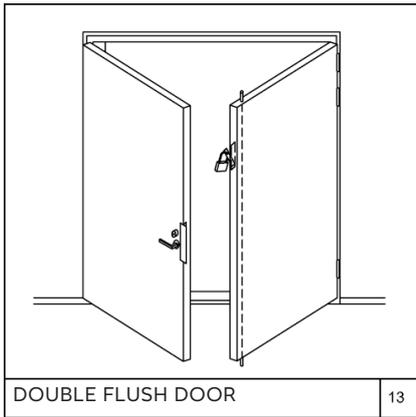
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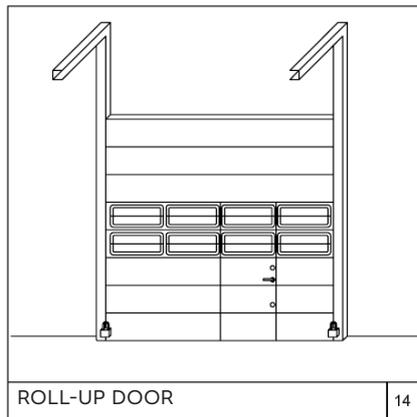
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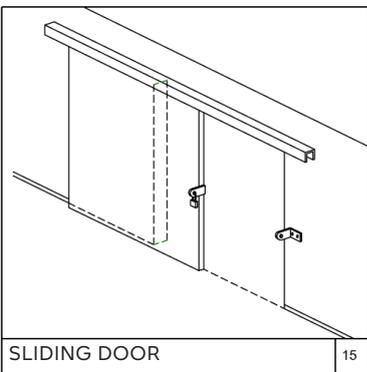
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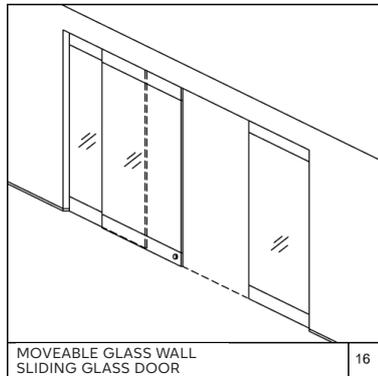
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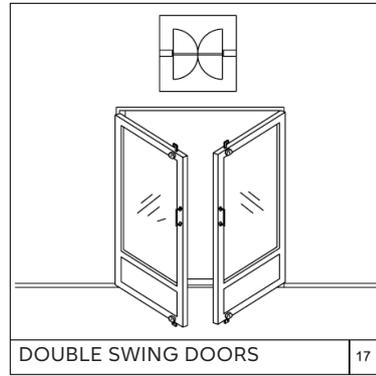
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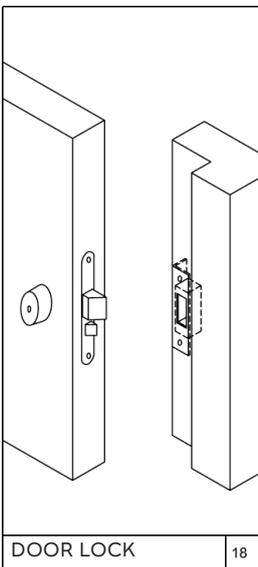
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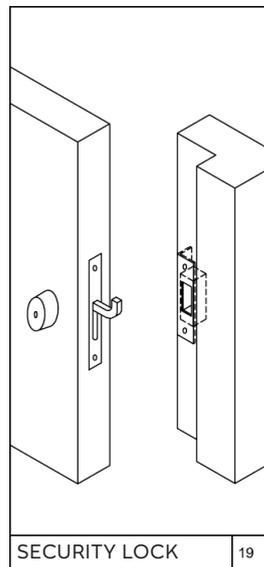
16



17



18



19

Insurance is granted by the following mutual insurance companies in LocalTapiola Group (business ID):
LähiTapiola **Etelä** (0139557-7) | LähiTapiola **Etelä-Pohjanmaa** (0178281-7) | LokalTapiola **Sydkusten** -
LähiTapiola **Etelärannikko** (0135987-5) | LähiTapiola **Itä** (2246442-0) | LähiTapiola **Kaakkois-Suomi**
(0225907-5) | LähiTapiola **Kainuu-Koillismaa** (0210339-6) | LähiTapiola **Keski-Suomi** (0208463-1) |
LähiTapiola **Lappi** (0277001-7) | LähiTapiola **Loimi-Häme** (0134859-4) | LähiTapiola **Länsi-Suomi** (0134099-8) |
LähiTapiola **Pirkanmaa** (0205843-3) | LokalTapiola **Österbotten** - LähiTapiola **Pohjanmaa** (0180953-0) |
LähiTapiola **Pohjoinen** (2235550-7) | LähiTapiola **Pääkaupunkiseutu** (2647339-1) | LähiTapiola **Savo**
(1759597-9) | LähiTapiola **Savo-Karjala** (0218612-8) | LähiTapiola **Uusimaa** (0224469-0) |
LähiTapiola **Varsinais-Suomi** (0204067-1) | LähiTapiola **Vellamo** (0282283-3) |
LocalTapiola General Mutual Insurance Company (0211034-2)

The companies' contact details are available at www.lahitapiola.fi.

