
INVESTIGO OY AB
IMPARTIAL BUILDING HEALTH EXPERT
WWW.INVESTIGO.FI

INVESTIGO OY AB

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- Entrepreneur and CEO, Investigo Oy Ab, 2010 →
  - Investigo has 15 experts working with building health
- Certified Board Member (HHJ)





CASES FROM THE FIELD

Common causes of water damage and leaks today, other than the “traditional old pipes, dishwashers and so on…”.

We are going to talk about for example:

- Climate changes
- Solar panels
- Modern sewages that lasts only 10 years
- Technical service life

CLIMATE CHANGE

- More frequent heavy rainfall and stronger winds
- Increased stress on the roof
  - Roof leaks are becoming more common, and roof sealants and joints are often not inspected or maintained as regularly as they should be.
- Increased stress on the walls
  - In log houses without a separate facade, water comes through the walls due to increased water pressure.
- Increased stress on the foundations and lower parts of buildings
  - Urban drainage systems may not be able to cope with increasing volumes of rainfall, leading to flooding and increased water pressure around buildings.
  - Seinäjoki 16.8.2026, over 100mm rain in one hour.





SOLAR PANELS ON THE ROOF

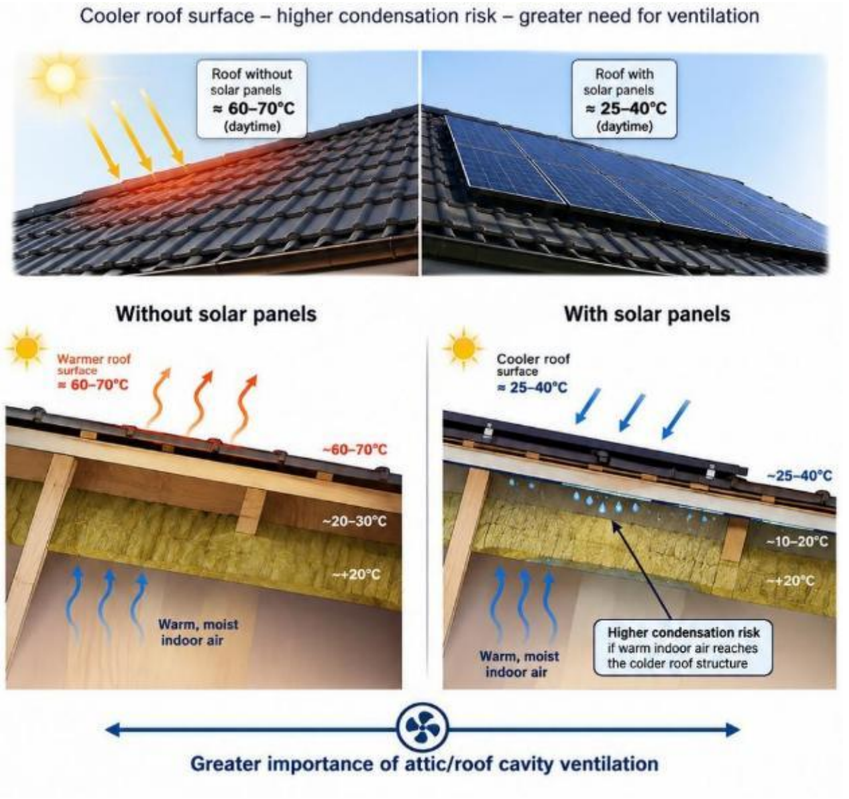
- In many cases, roof leaks occur during the first winter after solar panels are installed.
  - Ice and snow can no longer slide freely off the roof.
  - This can be particularly problematic in older houses with less insulation or more air leakage. The lower layers of snow may begin to melt, and the resulting water can be forced into areas that have not leaked before.

- According to the Finnish Roofing Association, solar PV systems should be installed so that they do not cause water to accumulate or increase the risk of snow and ice accumulation on the roof.



SOLAR PANELS ON THE ROOF

- Solar panels shade the roof surface and can significantly reduce its daytime temperature.
- In cold climates, a cooler roof structure may reduce its drying potential and increase the risk of condensation if warm, moisture-laden indoor air enters the roof assembly.
- Therefore, good airtightness and adequate ventilation of the roof cavity become particularly important when solar panels are installed.
- The impact should always be assessed considering the roof structure, insulation, ventilation and local climate conditions.



TECHNICAL SERVICE LIFE

- How long we can expect something to “work or perform as good as new”.
- In Finland, RT guidelines provide information on the expected service life of various building components and recommended maintenance intervals.
- However, there is often still a lack of understanding that buildings and their components do not last forever.
- Many leaks and moisture-related damages could be prevented through timely maintenance and renovation – instead of waiting until a failure occurs.



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KIINTEISTÖN KESKIMÄÄRÄISET TEKNISET KÄYTTÖIÄT JA KUNNOSSAPITOJAKSOT
Rakennustekniikka

Tässä ohjekortissa esitetään kiinteistön rakenteiden, rakennusosien ja aluerakenteiden keskimääräiset tekniset käyttöiät, tarkastusvälit, huoltovälit ja kunnossapitojaksot.

Tietoja voidaan käyttää lähtötietoina mm. kuntoarvioissa, kuntotarkastuksissa, energiakatselmuksissa, kuntotutkimuksissa ja kunnossapidonsuunnitteluun

MODERN CAST-IRON SEWAGE

- Premature Corrosion of Cast-Iron Sewage Pipes

- Corrosion and leakage have been reported in modern cast-iron sewage pipes **that are less than 10 years old**, although their expected technical service life is approximately 30–50 years.

- A major cause is believed to be improper cutting and insufficient protection of cut pipe ends during installation.

- When the protective epoxy coating is removed during cutting and the exposed surface is not properly treated, corrosion can begin quickly when exposed to moisture. Over time, this may lead to localized corrosion, deterioration of the internal coating, and eventually leakage near pipe joints.



COATED SEWAGE PIPES

- Premature Failure of Coated Sewage Pipes

- In Finland, many old cast-iron sewage pipes were internally coated rather than replaced around 10–15 years ago. Some of these systems are now showing premature failures, including cracking, deterioration and detachment of the coating.

- Once the coating becomes damaged, wastewater can reach the original cast-iron pipe, allowing corrosion to continue beneath the coating.

- Detached coating may also cause blockages and eventually increase the risk of leakage and water damage.

- Unlike pipe lining (CIPP lining / sukitus), coating does not form a new self-supporting pipe inside the old one. Therefore, the condition of the original pipe remains critical.







MECHANICAL ROOMS

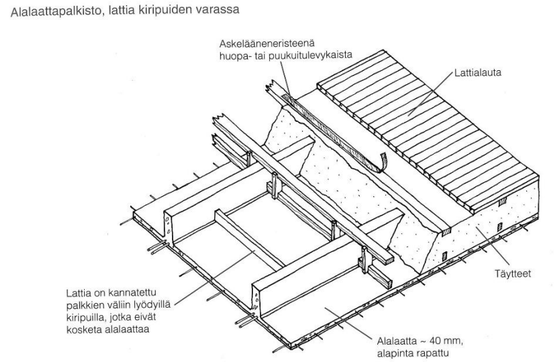
- Technical rooms often have a floor drain – but no waterproofing.
- Building regulations in Finland and Åland require floors with a floor drain to be properly waterproofed.
- Without proper waterproofing, even a small leak can cause significant damage.

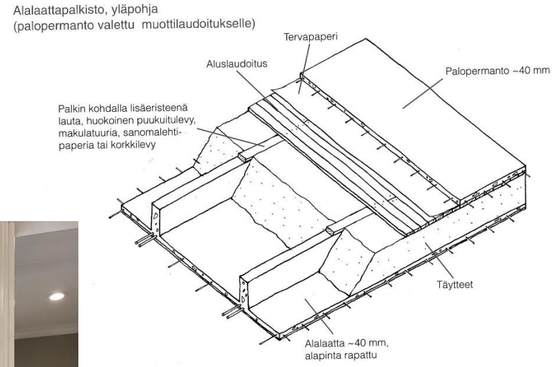


OTHER EXAMPLES

- Some building structures are particularly vulnerable to water leaks.
  - Even a small leak can cause extensive damage.

- Condensate drainage from ventilation units in residential buildings is often inadequate.
  - In some cases, condensate is simply drained into a bottle or a similar container instead of being properly discharged.








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