Typical damages and weak points in old houses & apartments in Germany

till 1900

- Thermal insulation
- Soundproofing
- Practically no sealed basements leading to moisture
- Cracks in load-bearing beams.
- Moist basements were needed cooling food Water pipes made of lead
- Usually, electrical wiring over plaster
- Sewage piping made of clay
- Electrical installation two-wires (instead of 3) and massively undersized (current norms are not met).
- Roofs made of bare bricks without insulation.
- Wooden ceilings with high sound permeability
- Basement ceilings made of concrete with steel planks, which might be rusted.
- wooden windows, single pane might be rotten, due to lack of maintenance
- wooden staircases,
- Toilets mostly in the staircase
- Water only in kitchen
- Very small bathrooms.

till 1935

- Lead piping
- Condensation issues because of too thin (outer) walls.
- Ascending humidity and moisture in basement because of non-existing sealing.
- Undersized wood-beamed ceilings, often bent through, partly sponge infestation.
- Skewed interior doors, non-standard sized-doors, making replacement more expensive
- Poor fire protection due to wooden staircase, often worn-out stairs.
- Often clogged and defective sewage pipes
- Almost everything undersized (electrical, wiring, structures etc.)

till 1945

- due to WWII, often rubble-based construction
- Minimalistic and poor building fabrics
- Roofs were made of certain woods, which are more subject to be bad.
- Partial defects of structures, since building houses needed to go fast
- Thin inner & outer walls leading to bad insulation
- Missing Fire protection
- Uninsulated roof
- Porous gas pipes
- Pest infestation on wooden ceilings

from 1945

- Lead pipes, partially use of steel for piping
- Building improved since end of WWII
- Often unhealthy materials used like: Asbestos, lead based paints, formaldehyde paints and tar
- Missing Fire protection
- Tar-containing glue used for flooring
- Uninsulated Roof
- Porous gas pipes
- Pest infestation on wooden ceilings
- Thin inner walls

Typical damages and weak points in old houses & apartments in Germany

from 1960

- Ceiling now always made of concrete, stone & staircases are of concrete as well
- Since 1971 ban of lead-based pipes, primarily use of steel pipes from now on
- Thermal and sound insulation are getting better but still insufficient.
- Drainage laid around basement to counter moisture & water in basements
- Partly aluminum windows, uninsulated window frames, still often single panes.
- Tar based glue
- Harmful insulation material due to too short fibers
- Concrete damages especially at balconies & loggias due to defective sealing
- Insufficient regulation on central heating systems

from 1970

- A lot of concrete is used
- Issues with heating & cooling bridges (concrete conducts cold better = balconies/windows have mold issues)
- Often concrete renovations necessary especially to balconies
- First regulations to sound insulation.
- Mostly good layouts of apartments
- Flat roofs used; meanwhile having moisture problems.
- Often water piping issues
- Outdated Heating systems
- First Copper pipes are used
- Sewage pipes made of steel or plastic.
- Partly deficiencies in fire protection
- Tar based glue used
- Facade insulation only minimally (if at all)
- Insufficient central heating with regard to emissions

from 1980

- Frame-insulated plastic windows with double panes
- Focus is being laid on more building structures
- Thermal insulation and sound insulation
- Fire protection starts getting better
- Often damaged roof connections especially with flat roofs
- Plastic sheets for flat roofs often too thin
- Insulation minimalistic (but are being started to being used)
- Central heating older than 1985 must be changed due to emission reasons
- Electrical wiring free of complaints from now on, need for maintenance only in mid-term

from 2000

- Water piping more and more of plastic (instead of copper and steel)
- Insulation is getting better – not much improvement till today.
- Usually, triple pane windows with quite up-to-date values for heat & soundproofing