

Plan ahead. Renovate better.

Your guide from the first idea to the right solution.



A renovation does not begin with the first construction work. It begins with decisions:

What needs to be improved? What is already there? And which measures need to work together?

Clarifying these questions early helps you take space, connections, costs and schedules into account. This turns initial ideas into clear requirements – and individual measures into a project that suits your home and the way you use it.

This guide helps you prepare for the next decisions. It focuses on comfort, warmth and fresh air, as well as the interaction between heating, cooling and ventilation. Zehnder supports you and the professionals involved with solutions, planning tools and technical advice.

What's your next plan?

Level 1 | Small Update

- Replace a radiator or make a targeted improvement to a single room.
Goal: A solution that fits your needs and the installation situation.

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Level 2 | Partial Renovation

- Change several rooms or combine measures such as window replacement, insulation upgrades and heating modernisation. **Goal:** A coordinated plan for interconnected measures.

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4-5

Level 3 | Comprehensive Renovation

- Modernise the existing building comprehensively.
Goal: An integrated concept for the building and indoor climate.

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6-7



How to use the checklists

Start with the level that best matches your project. The dependencies between individual measures are also important. **Use the points as a basis for discussion and tick off what has been clarified.**

The **Pro Tips** are intended for professionals and can be discussed together.

The checklists provide guidance but do not replace individual professional planning.

Level 1 | Small Update

Minimal Effort. Well Prepared.



Would you like to make a single room more comfortable, find a radiator that better suits your everyday needs or improve air quality? Even a manageable update is easier when your needs are clear before selecting a product. Often, just a few questions determine how straightforward the implementation will actually be.

Is this the right level for your project?

This level is designed for targeted improvements, such as replacing a radiator in a living space, adding warmth and comfort to a bathroom or installing a ventilation solution for a single room. If pipework, room layouts and several trades are being changed extensively, also refer to Level 2.

Three decisions before ordering:

1.

Define your needs.

Decide what should improve: warmth, fresh air, ease of use or design. Distinguish between essential functions and additional preferences. Also consider how the room will be used in the future.

2.

Assess the situation.

Measure the available space and take photos of existing connections and the installation location. Have a professional check which existing components can be reused and what preparatory work is required.

3.

Choose the right solution.

Compare not only the products, but the entire installation: Is the solution technically suitable? What will it cost including installation? Who will take care of connections, mounting and the final handover?

Zehnder Pro Tip: Check first, then replace.

Existing connections can simplify installation.

When replacing a radiator, check connection dimensions, mounting and output under the actual operating conditions. For electrical products, the power supply and permitted installation location should be assessed by a professional.

Zehnder Pro Tip: Ventilation for individual rooms

Decentralised ventilation units do not require a central air distribution system.

However, the installation location, external wall opening, acoustics and maintenance access should still be checked, as well as how the solution interacts with the rest of the building.

For your first consultation:

Bring measurements, photos, existing product information and a short list of your requirements. This will help the professional assess feasibility early.

Level 1 | Small Update

Your Checklist

From your needs to the right individual solution.

1. Needs and budget

- ☒ Your main goal is clear: more warmth, better air quality, easier operation or a different design.
- ☒ Desired functions have been noted – such as operating times, towel warming or easily accessible controls.
- ☒ The budget includes the product, removal, disposal, installation, necessary adjustments and a contingency.

2. Room and requirements

- ☒ Dimensions and the installation location are documented. Sufficient space remains for movement, operation and maintenance.
- ☒ A qualified professional has checked the connections, mounting and required heating output or ventilation solution.
- ☒ Preparatory work involving electricity, pipework or walls, as well as any required approvals, has been clarified.

3. Selection and installation

- ☒ Following professional assessment, the solution is suitable for your needs, the room and the existing technical conditions.
- ☒ The quotation specifies the scope of supply, additional work and responsibilities. Any outstanding services have been clarified.
- ☒ Delivery and installation have been coordinated; access, dust protection and restrictions on use have been taken into account.

4. Prepare the handover

- ☒ It is clear who will check and document the function, mounting and settings after installation.
- ☒ A handover has been arranged; for ventilation units, this also includes filter replacement and cleaning.
- ☒ Documents and invoices will be collected. A contact person for any follow-up questions has been identified.

Zehnder Pro Tip: Expand your knowledge with the Zehnder Academy

Use the training courses on designer radiators and comfortable indoor ventilation to expand your product and application knowledge. Check the current programme to find the content relevant to your project.

Discover training opportunities: www.zehnder-systems.de/de/akademie



Level 2 | Partial Renovation

Multiple Measures. One Coordinated Plan.



New windows, better insulation, a different heating system or several modernised rooms: decisions now have an impact beyond the individual installation location. The key is to understand which measures depend on one another – and what needs to be clarified before requesting quotations, before construction begins and before walls or ceilings are closed.

Is this the right level for your project?

Use this level when several building elements, rooms or systems are being changed, but the entire building is not being comprehensively redesigned. This also includes renovations carried out in stages: a later step may already require space, connections or specific preparatory work today.

Three decisions for interconnected measures:

1.

Define your renovation goals.

Which rooms and building elements will change now, and which later? Decide what you want to improve: comfort, air quality or energy use. Set priorities based on necessity and budget.

2.

Understand how the measures interact.

New airtight windows can reduce natural air exchange. Additional insulation alone does not necessarily increase airtightness. A new heating system changes the requirements for heat distribution. Have a professional assess what can remain and what needs to be adapted.

3.

Coordinate the different trades.

Coordinate the sequence of work and responsibilities with the relevant professionals. Clarify key decisions before requesting quotations or starting construction, and check concealed connections before walls or ceilings are closed.

Zehnder Pro Tip: Plan for the future state.

Include planned changes to windows, insulation and airtightness in the relevant design calculations. When modernising the heating system, assess the heating load, existing heating surfaces and hydraulic balancing using a common data basis.

Zehnder Pro Tip: Make preparatory work visible.

Document who is responsible for each interface and what needs to be completed by when. Have concealed connections and routing checked and documented before walls or ceilings are closed.

For the joint consultation:

Gather floor plans, information about planned window and insulation measures and details of the existing heating and ventilation systems. Add planned project stages and note which rooms need to remain usable during the work.

Level 2 | Partial Renovation

Your Checklist

Turning individual measures into one coordinated process.

1. Scope and stages

- ☒ Measures planned for now and later have been identified. Goals, budget and priorities are aligned.
- ☒ Affected rooms, periods when spaces cannot be used and temporary solutions for heating, hot water or access have been identified.
- ☒ Connections, routing and space reserves required for later stages have already been considered.

2. Existing conditions and interactions

- ☒ The building envelope, windows, heating and ventilation have been assessed together. Necessary adaptations have been identified.
- ☒ Where new airtight windows or improvements to the building's airtightness are planned, future ventilation requirements, including moisture removal, have been clarified.
- ☒ When replacing the heating system, existing heating surfaces and distribution have been professionally assessed for compatibility with the planned system.

3. Planning and responsibilities

- ☒ Required heating output, air volumes, connections and routing have been clarified for the affected systems.
- ☒ Preparatory work, delivery times and trades have been coordinated. One person is responsible for maintaining the overall schedule.
- ☒ Quotations also include openings, electrical connections and the reinstatement of affected surfaces.

4. System interaction and handover

- ☒ It is clear who will set and check heat distribution, air volumes and controls for the affected systems.
- ☒ Joint functional tests and a handover have been agreed. Settings and outstanding work will be documented.
- ☒ Documentation for the completed solution, operation, maintenance and later project stages will be brought together.

Zehnder Pro Tip: Expand your knowledge with the Zehnder Academy

Complement project coordination with suitable training on the Zehnder solutions being used. The Academy offers practical training, live online training and e-learning. Topics and dates can be found in the current programme.

Discover more: www.zehnder-systems.de/de/akademie



Level 3 | Comprehensive Renovation

The Whole Building. One Integrated Concept.



For a comprehensive renovation, decisions are made that will shape the building for many years. The building envelope, rooms, heating, cooling and ventilation need to work together. This requires a shared vision and reliable planning information before individual systems are designed and services commissioned.

Is this the right level for your project?

This level is intended for projects where the existing building is being comprehensively modernised – such as a full refurbishment or an extensive energy-efficient modernisation. Architecture, building services and future use are considered together.

Three decisions for comprehensive planning:

1.

Define your project goals.

How will the rooms be used in the future? What are the requirements for temperature, air quality, acoustics and accessibility? Align goals, budget and priorities with owners, occupants and the planning team.

2.

Understand the building.

Gather available plans and information on the existing building and technical systems. Identify known constraints and missing information. Have qualified professionals assess technical requirements, routing and equipment space before the solution is finalised.

3.

Develop and coordinate the solution.

Plan architecture and building services together. Compare different solutions against the agreed goals and long-term operation. Define responsibilities for decisions, costs and interfaces.

Zehnder Pro Tip:
Work from a common planning basis.

Coordinate heating load, cooling load where applicable, air volumes and operating conditions. Check control interfaces and avoid conflicting operating modes, such as simultaneously heating and cooling the same zone.

Zehnder Pro Tip:
Plan the handover from the start.

Define tests, measurement protocols and responsibilities for system-wide commissioning at an early stage. Plan clear user instructions and a structured process for dealing with outstanding work.

To get started with the planning team:

Gather existing plans, known defects, consumption data and details of previous alterations. Add requirements for future use and long-term changes. Consumption data provides guidance but does not replace technical design calculations.

Level 3 | Comprehensive Renovation

Your Checklist

From a shared vision to a reliable overall plan.

1. Requirements and responsibilities

- ☒ Goals for use, indoor climate, energy and accessibility have been prioritised with the project team; budget and future requirements have been considered.
- ☒ Tasks within the project team have been assigned. Responsibilities for overall planning, costs and schedules are clearly defined.
- ☒ Surveys of existing conditions, approvals and required documentation have been clarified with professionals and scheduled.

2. Reliable planning information

- ☒ Available plans and information have been gathered. Missing data, known defects and questions requiring professional assessment have been identified.
- ☒ Qualified professionals have calculated the required heating output and air volumes and assessed summer heat protection and, where applicable, cooling requirements.
- ☒ Equipment space, routing and maintenance access have been coordinated with the planning team; acoustics and fire protection have been assessed by qualified professionals.

3. Integrated concept and approvals

- ☒ Qualified professionals have confirmed that heating, ventilation, cooling where applicable, and controls are compatible with the building envelope and intended use.
- ☒ Options have been compared in terms of investment, operation, maintenance and adaptability. Decisions have been documented.
- ☒ Approved plans are accessible. Changes are assessed for their impact on costs, schedules and system performance.

4. Commissioning and long-term operation

- ☒ A commissioning plan defines tests, settings and responsibilities for the individual systems and how they interact.
- ☒ Acceptance, user instruction and handover have been agreed, including as-built plans, settings, test records and maintenance information.
- ☒ Responsibilities for operation and maintenance have been assigned. Procedures for outstanding work and any required adjustments have been agreed.

Zehnder Pro Tip: Expand your knowledge with the Zehnder Academy

Coordinate the project team's training requirements with the current Academy programme. For specific requirements, professional partners can request customised training.

Discover more: www.zehnder-systems.de/de/akademie





Contact and further information

Do you have questions about your renovation project or need information about Zehnder solutions? Our contacts will help you find the right person for advice and planning.

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