

Typical services for the design of a single-family home

Here is an example of typical services for the different phases of home design and construction. Services will be tailored to the needs of each individual project.

I SCHEMATIC DESIGN

I.1 An initial site visit to launch the project, including:

- Site analysis: walking the site together to gather information on natural features, views, solar potential and your vision for project implementation.
- Needs analysis: a discussion of the needs identified in the wish list that you provided.

I.2 Analysis of applicable regulations (Building code, zoning bylaws...)

I.3 Preliminary sketches: the evolution of the following drawings will be communicated to you regularly.

- Concept and project narrative;
- Site plan based on a surveyor's plan provided by the Client in CAD format;
- Floor plan(s) of all levels
- Exterior elevations
- Exterior perspective(s) to show the integration of the house into its site;
- Interior perspective(s) to show the living spaces;
- A palette of proposed materials for exterior finishes

I.4 A first meeting in person or virtually for the presentation of preliminary sketches;

I.5 Follow up meeting(s) to present the preliminary sketches adjusted according to your feedback;

I.6 Preliminary cost estimate: a high-level estimate based on the construction costs of recent similar projects.

I.7 Schematic Design Report in PDF form that contains all of the drawings listed above. The next project phase will not begin until the schematic design has met your approval, to ensure that the concept meets your needs and expectations.

2 CONSTRUCTION DOCUMENTATION

- 2.1 **Architectural plans and specifications** based on the approved Schematic Design:
- Wall, floor and roof assemblies
 - Window and door schedules
 - Site plan (note: this does not replace the surveyor's site plan – it is used to coordinate the location of the house with the surveyor and other professionals involved in the project)
 - Floor plan(s)
 - Reflected ceiling plans that show ceiling finishes, light fixtures and switches
 - Sections
 - Elevations
 - Construction details for the building envelope
 - Details of staircases, guardrails and handrails
 - Millwork drawings for kitchen cabinetry, bathroom vanities, built-in storage, etc.
 - Large-scale plans & elevations of bathrooms & kitchens showing the location of plumbing fixtures, and the layout of ceramic tile finishes.
 - Specifications will be included in the drawings
- 2.2 **General coordination** with the different professionals involved in the project design (municipality, engineers, surveyor, etc.). These professionals will be hired directly by the client.
- 2.3 **Whole building energy modelling using the Passive House Planning Package (PHPP)**
- 2.4 **Modelling key junction details for thermal bridging potential** (optional) for projects pursuing Passivhaus certification, or for junction details that present a risk of thermal bridging.
- 2.5 **Preparing documentation for building certification under the international Passivhaus standard** (optional). If you wish to certify your project, Tandem can provide all the modeling and documentation required. This documentation will then be forwarded to an independent certifier hired directly by the client since certification requires that all projects be reviewed by a third party.
- 2.6 **Assistance with obtaining bids from contractors**, depending on the type of contract chosen by the client, either a cost-plus contract or a fixed price contract.
- 2.7 **Building permit:** preparing the architectural documents required to apply for a building permit
- 2.8 **Providing the completed architectural construction documentation**

3

CONTRACT ADMINISTRATION DURING CONSTRUCTION

Architectural services in this phase are optional, but highly recommended to ensure continuity between the design and construction phases.

- 3.1 **Respond to the contractor's questions** and issuing supplementary instructions as needed.
- 3.2 **Review shop drawings** for the fabrication of windows, millwork, etc.
- 3.3 **Construction site visits** to review progress and help ensure that the project is being built as it was designed.
- 3.4 **Review progress payments** to the contractor to compare work billed and work executed, including the applicable holdbacks required in the provincial lien legislation
- 3.5 **Specify and review physical testing related to Passive House performance**
Blower door tests are conducted on site and are an extremely useful tool for improving the air tightness and durability of the building envelope. Despite their proven benefits, these tests are not yet common practice in the construction sector, so Tandem can provide coaching to specify the type of test, the targets to be achieved and how to use the test as an opportunity to improve air tightness.
- 3.6 **Preparing documentation for building certification under the international Passivhaus standard** (optional). Certification requires that the construction process be documented with photos of the work in progress and the products used, results of blower door tests and commissioning of the ventilation system. Tandem is familiar with these requirements and can prepare the required documentation and submit it to the certifier.