LEVY ART + ARCHITECTURE

GUIDE TO
ARCHITECTURE TERMS



Architectural ideas are developed in a collaborative process of Conceptualization, Representation, Materialization, and Conversation

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INTRODUCTION

Whether you are planning to build in an urban environment, or dream of a standalone structure in wine country, the mountains, or along the coast, our guide to architecture terms will serve as a quick primer to help you work effectively with an architect on your new custom residential project. This outline of building components and systems acts as a springboard for further discussion with your chosen professional.

Custom architecture, as practiced by Levy Art + Architecture and other firms across the globe, is a long yet rewarding process with very careful planning by a set of professionals focused on high-level execution. Ideally, an architect will be involved early on in your project, even before land is purchased, to comment and advise on feasibility, and will act as a strategic advisor through all project phases.

If you are contemplating a project or already in the midst of one, this glossary of common architectural terms will help you become aware of the multitude of options there are – and decisions that need to be made – to make your project successful!

ABOUT LEVY ART + ARCHITECTURE

Ross Levy, licensed architect and principal at Levy Art + Architecture, has been creating environmentally-conscious designs that support modern lifestyles for nearly 30 years. With his background as a building contractor, he brings a craftsman's perspective and attention to detail to every unique project. Ross completed graduate work at Harvard University's Graduate School of Design, is a founding member of The Viet Nam Green Building Council, and has served for many years on the AIA Public Policy committee.

Levy Art + Architecture's work has been recognized by the American Institute of Architects and featured in publications such as **Architectural Digest**, **SPACES**, **Dwell**, **Dezeen**, and **Fine Homebuilding**.

ARCHITECTURE – GENERAL TERMS

Architecture is the overall design and planning of your ideal project including the size, layout, and style of the structure. Discussing architecture basics will help to determine the overall look and feel of the building, and ensure that it meets your needs and preferences. A skilled architect will also act as the point of coordination between all of your other vendors (interior designers, landscapers, general contractors, lighting designers etc), so that you end up with a unified and complete vision.

1. **Building siting:** The process of selecting the best location on a piece of land for a building based on factors such as views, sun exposure, prevailing breeze, and local zoning codes.
2. **Total mass and volume:** The overall size and shape of a building, both inside and outside, which can affect the building's aesthetic appeal, energy efficiency, and functional layout.
3. **Interior organization, space, and flow:** The arrangement of rooms and their adjacencies, walls, doors, and other elements inside a building to create functional and efficient spaces that meet the needs of the occupants.
4. **Proportion of each space:** The relative size and dimensions of each room in a building, including ceiling height and floor area. This affects the overall comfort and functionality of the spaces.
5. **Features:** The unique design elements or functional features incorporated into a building, such as fireplaces, built-in storage, connection to outdoor living spaces, and shape of the ceiling.

i. **Double-height spaces:** An interior space that extends vertically to the full height of two stories, which can create a sense of openness and grandeur in a building.
ii. **Stairs:** Can be designed to enhance the aesthetic appeal of the building and create a sense of visual interest.
iii. **Beams and exposed structure:** The structural elements of a building that are left exposed, which can create unique design features.
iv. **Fenestration:** Critical to the indoor environment and energy performance of the building, large windows or doors can be opened to connect the interior to the outdoor environment. Properly planned with features such as eaves and overhangs, they provide natural light and ventilation.
v. **Ceiling shapes and skylights:** The design of the ceiling, including shapes, angles, and the inclusion of skylights, can affect the aesthetic appeal and functionality of a building.

SITE WORK

Prepare the canvas for your architectural masterpiece with careful site work considerations. This step ensures that your land is ready to be built upon, and all necessary utilities are planned before construction begins. It includes tasks such as clearing and leveling the site, and installing utilities like water, gas, and electricity, as well as consideration of how you'll access your site i.e. what the approach is like. If merited, architects will additionally coordinate with a landscape architect. Every aspect of your property will be strategically planned to create a harmonious and functional environment.

- **Landscape**
- **Terraces and decks**
- **Tree protection**
- **Irrigation**
- **Well location**
- **Propane tanks or other fuel storage**
- **Underground power feed**
- **Solar installation and inverters**
- **Fire protection tanks, stand-pipe and site locations**
- **Septic fields and redundant field areas**
- **Driveway layout and material**
- **Exterior lighting**

FOUNDATION

Here, we lay the groundwork for a solid and stable structure. This is the base of your building that supports weight and transfers earthquake loads to the ground. Architects will guide you through the choices that determine the strength and durability of your foundation, ensuring a secure base for your architectural vision, and preventing problems later on like settling or cracking. You'll receive recommendations based on a geo-technical investigation of your precise location, followed by a structural engineering recommendation. Again, the architect acts as a primary coordinator between all parties.

- **Soil study**
- **Drilled piers or spread footings**
- **Slab foundation**
- **Raised floor over crawl space**
- **Retaining walls**

FRAMING

Design and construction of the frame of the house, including decisions about the type of materials used such as FSC certified wood, engineered lumber, or all-steel. It's important to coordinate this, because all of the other systems will fit into it. Architects ensure that there is ample room for these other systems, avoiding conflicts during construction.

- **Forest Stewardship Council (FSC)-certified wood**
- **Engineered lumber, TJI, LVL, parallam**
- **Hybrid: steel, with wood for large open expanses**
- **All-steel**

HVAC

Heating, Ventilation, and Air Conditioning system. Your choice of mechanical equipment will determine the comfort of your home along with its energy profile. This important decision will reflect your concerns about sustainability, and resource consumption. An architect will work alongside a mechanical engineer to ensure that the HVAC system works alongside the building envelope and insulation in a holistic design package.

- **Heat pump** (provides both heating and cooling, air-to-air and air-to-water options)
- **Radiant floor** (hydronic / liquid-filled tubing integrated into floor system)
- **Electric resistance** (for some in-floor systems and radiant baseboards)
- **Conventional gas-fired furnace** **being phased out in many jurisdictions*
- **Wood stoves** **pollution-control devices are required*
- **Air conditioning with condensing coil**

INSULATION

This is what keeps your house comfortable and reduces your energy bills. The most advanced example is called a "passive house" that retains heat from human activity and sunshine, and employs virtually no mechanical space-conditioning systems.

- **Rock wool exterior**
- **Fiberglass** (incl. non-formaldehyde options)
- **Cotton batt**
- **Cellulose**
- **Spray foam** (open and closed cell)

SIDING AND EXTERIOR SURFACES

Choose the perfect exterior finish for your building. This choice includes considerations of aesthetics, durability, fire protection, and long-term maintenance requirements. From conventional siding options to rainscreen technology, the architect will help you select ideal materials.

- **Siding vs rainscreen**
- **Natural wood, stain and maintenance considerations Engineered siding and rainscreen** (i.e. parklex resin and bamboo strand)
- **Non-combustible materials** for wildfire resistance per Wildland Urban Interface (WUI) code requirements
    - **Fiber-reinforced concrete**
    - **Stucco and lime plaster**

ELECTRICAL AND SMART HOME

From integrated lighting control to advanced audio-visual systems, an architect can help you create a seamless and convenient living environment. In nearly all custom residential architecture, architects often work in coordination with a lighting designer and an audiovisual expert to develop a plan that will allow for different moods and uses, tailored to your needs. For many owners with multiple properties, security and remote access are important considerations.

- **Shade pockets with recessed blinds**
- **Lighting controls**
- **Integrated AV systems**
- **Security**
- **Remote access & operation**

ROOFING MATERIAL

The roof is a major architectural feature and determines much of the visual style of your project, as well as protection from the elements. The right selection will be aesthetically appealing while satisfying long-term durability and code requirements.

- **Code requirements for fire rating**
- **Asphalt shingle**
- **Slate shingle**
- **Tile** (terracotta and glazed)
- **Steel** (standing seam or horizontal lap patterns)
- **Flat roof options**
  - **Thermoplastic Polyolefin (TPO),** good for heat reflection
  - **Torch-down roll roofing**

FLOORING

This is the single largest surface area in the home. In addition to being a large visual component, many times heating and sound isolation systems are integrated into the flooring build-up. An architect will help you determine which material is appropriate for each living space, and then make a selection within that range.

- **Full-dimension hardwood**
- **Engineered hardwood**
- **Tile** (porcelain and ceramic options, large format)
- **Polished concrete, terrazzo**
- **Natural stone**
- **Cork and related** (marmoleum)
- **Sound control** (underlayments, ceiling separations, gypsum concrete)

WALL SURFACES

Walls, textures, and ultimately colors help shape the experience of a space. Sense of space is more than just shape – it is defined by material. Materials can be used to highlight special architectural features, contribute to the ambiance of a room, and create continuity throughout the home or office. This is an area where an architect will help you to create a personalized expression that elevates the style of your space.

- **Sheetrock** (texture and level of finish 3-5 for smoothness)
- **Lime washes**
- **Plaster**
- **Stone/ brick veneer**
- **Wood paneling** (natural, book matched, painted, stained)

CABINETRY

In addition to the functional components, cabinetry is an element where design & material expression can be introduced on a very refined level. This is where you will come into physical contact with your home, and you will appreciate the fine level of craftsmanship and detail that an architect can provide.

- **Wood or laminate**
- **Drawer and box construction** (dowel and peg, dovetail, formed steel, wood)
- **Door style** (framed or frameless, contemporary or period)
- **Manufactured or custom-built by local shop**

- **Wood-grain or paint finishes** for drawer & door faces

TILE AND STONE

With a large array of natural and man-made materials, an architect will guide you in selecting the best products for your lifestyle and style of the home, bringing a cohesive vision across all of your spaces. Every selection has its own benefits, applications, and limitations. An experienced architect will help you choose not only based on appearance, but help you make selections that will perform well over time.

- **Ceramic vs, porcelain options** (appropriate locations, installation techniques)
- **Glass tiles**
- **Cement tiles** with a decorative top-coat
- **Stone style and wear potential** (porosity, patina, maintenance)

BATH DETAILS

Bathrooms are becoming more and more spa-like. They are the places we go to relax and unwind. An architect will help you find the space and function for this most intimate portion of your project.

- **Number of fixtures** ranging from 3 (most basic) to 6 (most luxurious)
- **Plumbing hardware** (style, manufacturer, function, and finish)
- **Heated floor**
- **Shower / bath combo** vs **Wet room** vs **Freestanding tub**
- **Bidet / bidet-wc combo**
- **Curbless shower, linear drain**
- **Steam shower / steam room / saunas**
- **Makeup areas** incl. number of vanities
- **Accessories** incl. towel bars, towel warmers, robe hooks

CLOSETS

From functional storage to customized wardrobe displays, architects will assist you in designing closets that meet your organizational needs and reflect your personal style. This is an area where a custom home can be much more tailored than an ordinary house.

- **Walk-in** vs **in-room** (space and flow)
- **Custom cabinetry & fit-out** (drawers, wardrobes, specialty systems, shoe racks, watch displays) vs **Basic pole and shelf**
- **Dressing area, mirror location & lighting**

DOORS

There is a lot of style embedded in the door selection, including casings and surrounds. The front door, especially, is a signature piece in almost every home. There are also functional choices to be made; for example, door selection can create additional levels of privacy within the house. An architect will guide you to define a door style that is both functional and complements the overall aesthetic of the home.

- **Style** (flat slab vs. framed & paneled, painted vs. wood grain)
- **Baseboard and casings** (disappearing or surface-applied)
- **Hardware and fixtures** (handles, hinges, and door stops)

CONCLUSION

Now armed with a deeper understanding of these architectural terms, you're equipped to embark on your custom home design journey with confidence!

Our team of experts at Levy Art + Architecture is ready to assist you every step of the way. **Schedule your complimentary 20-minute consultation here:** https://calendly.com/rosslevy to have your questions answered, regardless of the phase your project is in.

Together, let’s create a beautiful, functional, and sustainable building that perfectly aligns with your unique vision and requirements!