

# ARCHITECTURAL TERMS AND DEFINITIONS

**Adaptive re-use** – Refers to the process of reusing an old site or building for a purpose other than that for which it was built or designed.

**AIA** – American Institute of Architects --- a professional organization for architects in the United States.

**AIA Honor award** – Recognizes achievements for a broad range of architectural activity in order to elevate the general quality of architectural practice, to establish a standard of excellence against which all architects can measure performance, and to inform the public expectations for architectural practice, its breadth, and its value.

**Allée** – (pronounced ə'lä/) – An alley or walkway in a formal garden or park, lined on both sides by trees or shrubs.

**Arcade** – A covered passageway with arches along one or both sides. A series of arches supported by columns or piers. The façade of Northside Middle School has an arcaded fenestration.

**Art Deco** – The predominant decorative art style of the 1920s and 1930s, used most notably in household objects and in architecture. Highly stylized with an emphasis on vertical lines, characterized by precise and boldly delineated geometric shapes and strong colors. Buildings in the style are identifiable by the use of angular geometric ornaments often zigzags, chevrons and other stylized decoration of vaguely Egyptian or Persian character.

**Art Moderne** – Developed during the 1930s and continued through the 1950s, the Art Moderne decorative art and architecture style emphasized horizontal lines that wrapped around rounded corners of structures and objects. Buildings in the style are identifiable by simplified, streamlined architectural ornamentation. The style was prevalent in aerodynamic locomotive and car designs and commercial buildings related to transportation, particularly gas stations.

**Art Nouveau** – A style of decorative art, architecture, and design prominent in western Europe and the US from about 1890 until World War I and characterized by intricate linear designs and flowing curves based on natural forms.

**Asymmetrical** – Not symmetrical, lacking symmetry. Asymmetrical design has unequal visual weight on either side of a central line, but those unequal visuals need to balance each other to be successful. Asymmetrical designs can evoke feelings of movement and seem more modern than symmetrical design.

**Asymmetry** – Not identical on both sides of a central line (see also Symmetry) also called informal or unequal balance

**Barrel vault** – A barrel vault, also known as a tunnel vault or a wagon vault, is an architectural element formed by the extrusion of a single curve (or pair of curves, in the case of a pointed barrel vault) along a given distance.

**Battered walls** – Batter in construction is a receding slope of a wall, structure, or earthwork. The term is used with buildings and non-building structures to identify when a wall is intentionally built with an inward slope. The granite walls of Hamilton Center are battered.

**Bosque** – A cluster, group, or grove of trees.

**Bush-hammered concrete** – Concrete having an exposed aggregate finish; usually obtained with a power-operated bush-hammer which removes the smooth surface of the concrete to expose the aggregate (stone).

**Cable-stayed bridge** – A bridge in which the weight of the deck is supported by a number of cables running directly to one or more towers.

**Campanile- (pronounced "camp a NEEL ee")** – A bell tower, especially one freestanding from the body of a church.

**Cantilever** – Any rigid construction extending horizontally well beyond its vertical support, a bracket for supporting a balcony, cornice, etc.

**Capital** – In architecture, crowning member of a column, pier, anta, pilaster, or other columnar form. From ancient classical architecture, the uppermost element usually decorated, of a column or pilaster. On the Breeden building, Thomas Beeby, working in the Post-Modern style, used Egyptian lotus capitals on two columns in the entry area. The decorations on the capitals resemble a cluster of lotus buds.

**Clerestory (pronounced "clear story")** – A portion of an interior rising above adjacent rooftops and having windows admitting daylight to the interior. The multipurpose room in Lincoln School has clerestory windows at the tops of the walls that allow light to enter the room from skylights in the adjacent corridor areas.

**Coffered ceiling** – A series of sunken panels, usually square, rectangular, or octagonal, in a vault, ceiling, or soffit.

**Colonnade** – A number of columns spaced at regular intervals, supporting an entablature or beam and often one side of a roof; differs from an arcade in that there are no arches involved.

**Contrast** – A great or striking difference. Form a contrast; set off. Contrast may be used to create an area of emphasis. Architects use contrast to draw attention to a particular feature or detail, make us look in particular places or move in certain directions. However, too much contrast can overpower harmony and unity.

**Curtain wall** – An exterior wall that attaches the supporting columns and beams in a building or is “hung on” as curtains are “hung on” a wall. The wall is of pre-fabricated panels composed of glass or concrete or metal or a combination of materials and provides no support to the building. Kevin Roche used glass and concrete curtain walls in the Cummins Office Building. Harry Weese used concrete curtain walls on the Cummins Technical Center and the Cummins Main Engine Plant.

**Cornice** – An ornamental molding around the wall of a room just below the ceiling.

**CorTen steel** – CorTen is a trade name for a **steel** alloy material originally produced by United States Steel. CorTen is a **weathering steel**. This material is a corrosion-resistant **steel**, that left uncoated develops an outer layer patina. This patina protects the **steel** from additional corrosion.

**Cranbrook** – Cranbrook has been one of the nation’s leading graduate schools of art, architecture, and design. It has been home to some of the world’s most renowned designers and artists. Eero Saarinen, Charles Eames, Daniel Libeskind, Michael and Katherine McCoy, and Jun Kaneko have all taught here, to name only a few. More at <http://www.cranbrook.edu/>

**Dichroic (pronounced "die-crow-ic")** – Glass having or showing two colors

**Façade** – Exterior face of a building, usually the one with the most architectural detail: However, often one refers to the “east façade” or “west façade”, etc., merely to identify a particular side of a building based on which direction it faces.

**Federal Style** – The Federal architecture style is characterized by simple proportions, box-like exteriors with side-gabled roofs, tall and narrow multi-paned windows with stone sills and lintels. Typically identified by a simple box form, two rooms deep, with doors and windows arranged in strict symmetry with sparse ornamentation. Popular in early Indiana history (from about 1810 to 1840), that most examples are located in southern Indiana, especially near navigable waterways and early roads.

**Fritted glass** – Glass embedded with ceramics or UV filtering patterns to help increase visibility for birds and help filter light/heat from the building

**Gable, gable end** – The vertical triangular portion of the end of a building having a double-sloping roof. Harry Weese used multiple gable ends to create an image of house-like elements combined to form a “little village” atmosphere for Lillian C. Schmidt Elementary School.

**Gothic style** – Architectural style in Europe that lasted from the mid 12th century to the 16th century, particularly a style of masonry building characterized by cavernous spaces with the expanse of walls broken up by overlaid tracery.

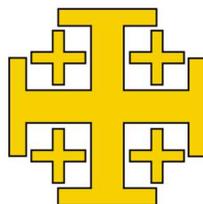
**Groin Vault** – Sometimes referred to as a double barrel vault, and is produced by the intersection of two barrel vaults at right angles.

**Human Scale** – Human scale is size or dimension of buildings or other structures in relationship to the human body. If a building is designed to human scale it is not too overwhelming or confining to a person.

**Indirect light** – (reflected light) Light that is seen as a result of being reflected off a wall or ceiling. In the Cummins Office Building, on top of the heating and air conditioning kiosks, light fixtures are mounted so the light points toward the ceiling and is then reflected down into the room. A similar phenomenon is at work on the south façade of St. Peter’s Lutheran Church where noontime sunlight hits the concrete and brick fin walls and is reflected back into the church.

**Italianate** – Mid-Victorian American architecture style, Italianate architecture was a fanciful reinterpretation of Italian Renaissance architecture. Identified by a hip roof and a wide entablature with heavy scroll brackets supporting deep eaves. Tall, narrow windows with stone sills with hooded, arched, or decoratively treated lintels. Italianate style was one of the most common in 19th century Indiana, it was used for public buildings, commercial and residential buildings.

**Jerusalem cross** – The Jerusalem cross, also known as Crusaders' cross or the "Five-fold Cross", is a heraldic cross or Christian symbol consisting of a large cross potent surrounded by four smaller plain crosses, one in each quadrant. (see below)



**Kinetic sculpture** – A three dimensional sculpture with moving parts.

**Kugel stone** – A floating sphere, calmly and freely steerable on its stone base with minimal water pressure.

**Leaded glass** – Refers to the windowpanes separated by lead strips or cames. In First Christian Church, rather than using stained glass, Eliel Saarinen used uncolored textured leaded glass. “Lead” does not refer to the chemical composition of the glass itself, but rather to the technique of joining the panes together.

**LEED** – Leadership in Energy and Environmental Design (LEED) – An international green building certification program for buildings and communities that guides their design, construction, operations and maintenance toward sustainability. It is based on prerequisites and credits that a project meets to achieve a certification level: Certified, Silver, Gold and Platinum.

**Loggia** – A space within the body of a building but open to the air on one side, serving as an open-air room or as an entrance porch.

**Mansard roof (pronounced MAN-sard)** – A roof that has four sloping sides, each of which becomes steeper halfway down.

**Match-Cast Joint** – A joint made by separating pre-cast segmental sections that are cast together and then separated. This makes it possible for the sections to fit perfectly together when constructed at the job site, and reduces construction time significantly.

**Narthex** – An enclosed passage between the main entrance and the nave (a vestibule entry) generally used only by the congregation of a church. At St. Peter’s Lutheran Church, the congregation requested a large narthex to serve as a gathering place before and after services.

**Nautilus** – Having a spiral.

**NHL** – National Historic Landmarks --- are nationally significant *historic* places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, just over 2,500 *historic* places bear this *national* distinction.

**NPS** – National Parks Service --- Charged with the trust of preserving the natural resources of America.

**Oculus** – A circular opening, especially one at the apex of a dome. The oculus at the peak of the roof in North Christian Church allows light to enter the sanctuary directly above the communion table.

**Organ rank** – Organ pipes are physically organized within the organ according to note and timbre into sets. A set of pipes producing the same timbre for each note is called a rank.  
**Essentially, one rank of pipes creates the sound of one instrument.**

**Parapet** – An elevation raised above the main wall or rampart of a permanent fortification, or any low protective wall or barrier at the edge of a balcony, roof, bridge, or the like.

**Pediment** – (In classical architecture) a low gable, typically triangular with a horizontal cornice and raking cornices, surmounting a colonnade, an end wall, or a major division of a façade.

**Pergola** – An arbor formed of horizontal trelliswork supported on columns or posts, over which vines or other plants are trained.

**Pier** – A vertical section of the wall between two window openings.

**Pinnacle** – An architectural ornament originally forming the cap or crown of a buttress or small turret, but afterwards used on parapets at the corners of towers and in many other situations. The pinnacle looks like a small spire.

**Pollarding** – A technique of trimming a tree back nearly to the trunk, so as to produce a dense mass of branches.

**Post-modern** – Postmodern architecture was a response to Modernism and began as a critique in the late 1960s and early 1970s. Postmodernism is difficult to define and in architecture, has been described as not so much a singular style but an amalgamation of many styles borrowed from history, reacted to urban context and embraced decorative traditions.

**Pritzker Prize** – To honor a living architect or architects whose built work demonstrates a combination of those qualities of talent, vision, and commitment, which has produced consistent and significant contributions to humanity and the built environment through the art of architecture.

The international prize, which is awarded each year to a living architect/s for significant achievement, was established by the Pritzker family of Chicago through their Hyatt Foundation in 1979. It is granted annually and is often referred to as “architecture’s Nobel” and “the profession’s highest honor.” The award consists of \$100,000 (US) and a bronze medallion. The award is conferred on the laureate/s at a ceremony held at an architecturally significant site throughout the world.

**Quoin (pronounced "coin")** – Is an angle at the outside corner of a building. You can call the corner itself a **quoin**, or use the word for the special stones or bricks that reinforce corners of brick or stone buildings.

**Relief Sculpture** – Carving raised above the background surface. In First Christian Church, Eliel Saarinen used raised relief sculpture to decorate several of the surfaces including the limestone and brick facades and exterior columns under the bridge.

**Richardsonian Romanesque** – Richardsonian Romanesque is a Victorian style of Romanesque Revival architecture named after architect Henry Hobson Richardson (1838-1886) whose masterpiece is Trinity Church, Boston. Characterized by the use of elements of Romanesque style, most were large ponderous public buildings that featured massive hipped roofs, a central wall gable, round stone arches and heavy masonry facades. Identified by round arched entrances, the use of rusticated stone, a central wall gable giving the building the general appearance of heaviness and mass.

**Roman bricks** – Long, thin bricks.

**Salt-glazed** – First used in the US in the early 20th century, salt-glazed tile was a process taken from the pottery business and used actual table salt to reduce oxygen during the burning process. The salt vaporized and chemically mixed with the silicates to form a salt glaze finish.

**Second Empire Architecture** – Dominant internationally during the second half of the 19th century. Although great variations exist, general characteristics can be identified: the building is large and, when possible, stands free; it has a square or nearly square plan with rooms disposed axially; externally, there is a profusion of classicistic detail; usually a high, often concave or convex mansard roof (having two slopes on all sides with the lower slope steeper than the upper one) breaks the profile; pavilions extend forward at the ends and in the centre and usually carry higher mansards; there is generally an overlay of a file of columns standing above a bow-shaped basement or piled one on another in several stories.

**Soffit** – The underside of an architectural structure such as an arch, a balcony, or overhanging eaves.

**Spandrel** – In concrete or steel construction, a beam or wall section that extends between columns or exterior walls, to help stabilize the construction. On the Cummins Office Building, the spandrels are pre-cast concrete panels that were erected with the help of a crane, helping to stabilize the pre-cast concrete columns. The Breeden building has green marble spandrels.

**Split-faced concrete block** – Split Face Block is an attractive alternative to standard block. It has a rough and rugged textured look which exposes the inner aggregates used in its manufacturing.

**Subtractive architecture** – Sections removed but the roof helps retain the original rectangular shape

**Symmetrical** – A regular, balanced arrangement on opposite sides of a line or plane; or around a center or axis. Pleasing proportions between the parts of a whole; well-balanced arrangement of parts; harmony. Formal or radial arrangements balanced uniformly on each side of the center axis.

**Symmetry** – The quality of being made up of exactly similar parts facing each other or around an axis. Symmetry gives a sense of formality and stability to a design. (see also Asymmetry)

**Tapestry brick** – What is referred to as Tapestry Brick, “came in assorted colors, from purples, olive greens, and blues to deep russet and chamois with a rough finish, designed to catch the light and create a warm glow. These colors were meant to be alternated across a wall, imparting a decorative, patchwork effect (hence the name tapestry) throughout the finished building. Tapestry bricks were a trademark of Fiske & Co., Inc., which touted them as a designer item to make homes that were, according to the ads, “restful and pleasing to the eye because colors and surfaces harmonize with the rocks, the trees, the grass.” tapestry bricks are no longer produced,

**Texture** – Texture can be visual and/or tactile and gives interest to a structure, aiding in visual appeal.

**Timbre (pronounced "tam-ber")** – The characteristic quality of sound produced by a particular instrument or voice; tone color.

**Tracery** – In architecture, tracery is the stonework elements that support the glass in a Gothic window.

**Vestibule** – A passage, hall, or antechamber between the outer door and the interior parts of a house or building.

**Void architecture** – A space in a floor, wall or ceiling for running cables and pipes e.g. Floor void, ceiling void. Also a term on architectural plans indicating an area where there is no floor, e.g. in an atrium or roof space. Essentially, it involves removing a portion of the volume or a plane of a structure.