

Architectural Elements

Going Through The Roof

by ZoAnn Campana

A roof is one of the most essential and underappreciated elements of a building. Second only to walls in terms of providing structural support to a building, a roof can tell you about a building's architectural style, about its local climate, or even about the cultural values of the people who built it. Roofs protect as much as they reveal. Without a good roof, buildings take on water and lose their heating and cooling efficiency, and building walls lose their stability. This installment of Elements will give you a quick rundown on the vocabulary of the roof.

Pitch

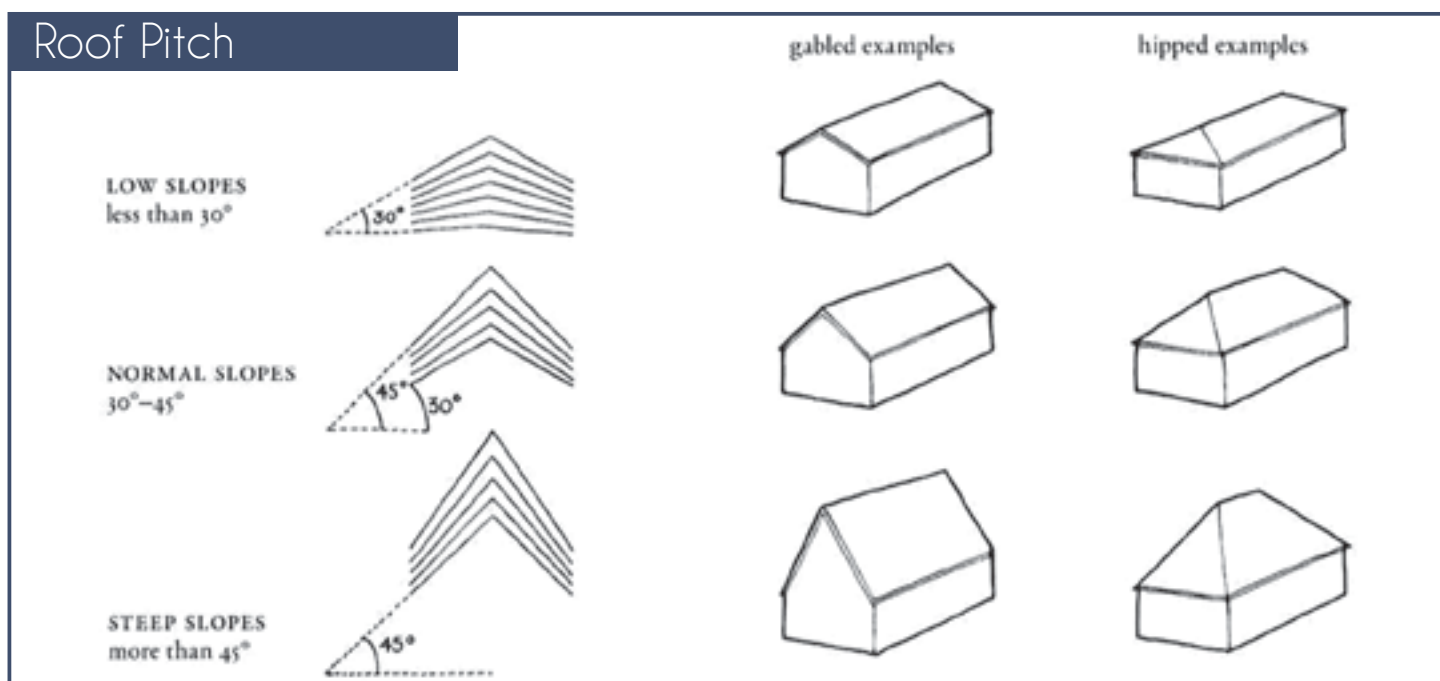
The slope of a roof is also referred to as its pitch. Generally speaking, a roof has three pitches: low, moderate, and steep. A low-pitched roof, also known as a shallow-pitched roof, has a slope of less than 30 degrees. A moderate pitch, which may also be referred to as a normal pitch, has a slope that ranges between 30 and 45 degrees. Finally, the slope of a steeply-pitched roof clocks in at more than 45 degrees.

The “why” behind different roof pitches can be traced back to vernacular architecture, which is—by definition—based on local needs, available construction materials, and cultural traditions. Local needs generally correspond to the climate and geography of a given area, whereupon the pitch of a roof becomes important. Regional American architecture illustrates this concept. Think of the flat roofs we tend to see in the Desert Southwest. Because wet weather is such a rare occurrence in the deserts of Arizona, New Mexico, Southern California, and Southern Nevada, a steeply-pitched roof is not necessary for shedding rain and snow. On the other hand, consider the pervasiveness of steeply-pitched roofs throughout the intermountain region. Here in Northern Nevada, the roof slopes increase in tandem with the elevation. As you climb west along Interstate 80 or the Mount Rose Highway, you will notice the increased prevalence of steeply-pitched A-frame cabins that are perfectly suited to shedding snow loads.

Shapes

This is where the roof gets really exciting. There is a ton of variation in roof shapes, and these shapes—combined with pitch—can assist in identifying the overall architectural style of a building. Roof shapes can be broken down into three basic categories: gabled, hipped, and flat.

A gabled roof features two sloping planes that join at the top to form a triangle. Variations within the gabled family include side-gabled and front-gabled, which are the most common. There are also cross-gabled roofs, which feature a side-gabled mass intersected by a front gable; gambrel roofs, which are commonly associated with barns and typically signal the Dutch Colonial style; shed or half-gabled roofs, which consist of only one sloping plane and are associated with the Contemporary style; and the jerkinhead, or clipped gable, roof which is essentially a front-gabled roof where the gable peak has been hipped or “clipped.”





1003 Arlington is an example of a low-pitched front-gabled roof.



820 N. Center is one of Reno's best examples of a cross-gambrel roof.



1035 La Rue demonstrates a side-gabled roof.



1031 Manor's roof is an example of a cross-hipped pyramidal roof.

The hipped roof differentiates itself from its gabled cousin by having four sloping planes instead of two. Subtypes of this category include the simple hipped roof, where all four planes join to form a roof peak that runs the length of the roof; the pyramidal roof, which sounds exactly like what it is—the four planes triangulate to form a pyramid; cross-hipped roofs, which feature a hipped mass intersecting another hipped mass at perpendicular angles; a double-pitched, or mansard, roof; and a gable-on hip roof, which is the opposite of a jerkinhead, consisting of a hipped roof topped with a small gable peak.

Lastly, we have the flat roof, which is more or less self-descriptive, although some roofs categorized as “flat” may feature barely-perceptible slopes. There

are only two subtypes within the flat roof family: flat with eaves, which is a flat roof that extends beyond the perimeter of the building; and flat with parapet, which is a flat roof where the wall extends above the edge of the roof. A good example of a parapetted roof is the Alamo, which has a flat roof with a Mission-style parapet.

As I previously mentioned, the combination of roof pitch and shape can assist with identifying the style of a given building. However, roof characteristics alone are not indicative of style. Just because the Alamo has a flat roof with a parapet, not all buildings with the same roof can be classified as Mission style architecture. For example, this roof is also associated with the Beaux

Arts, Spanish Colonial, and Italian Renaissance styles, among others. A number of architectural elements come into play when determining a building's style, including windows, doors, massing, materials, and other decorative details. Future installments of *Elements* will concentrate on each of these different features, eventually putting them together to spotlight individual architectural styles found throughout Reno. 

ZoAnn Campana is a local Historic Preservation Consultant who serves on the HRPS Board of Directors and is the architectural historian on the City of Reno's Historical Resources Commission.



832 Nixon Avenue has a flat roof with parapet.



This house, located at 1015 Gordon, illustrates a cross-gabled roof with a twist: the gable peaks are clipped, resulting in a jerkinhead shape.



Morrill Hall is Reno's most famous example of a mansard roof.
Photo by Ed Bierman