D.1 Porches

Removing original porch details is inappropriate.

1. The original porch has turned posts, brackets and spandrels, and a railing with tightly-spaced balusters.

2. Later, the brackets and spandrel were removed, and incorrect brackets added. Then the railing was changed to have widely-spaced balusters.

3. Still later, the wooden posts and railing were replaced with wrought iron, which is inappropriate to the style of the house.

4. Finally, square posts were installed, and everything was wrapped in aluminum, leaving the porch with little detail and character.
D.2 Porches continued

Historic porches should be retained, and not enclosed. There are many houses in the preservation districts where this has occurred, and the results are startling.
D.3 Porches continued

An historic porch usually has components with a lot of detail, which give the porch—and the preservation districts—special character. Often, the porch is the most uniquely detailed part of a house, where the builder displayed his or her special talents. Some common details are shown here.

Railings are often supported by piers, with broad caps that shed water and with details that are coordinated with the posts.

Top and bottom rails are thick and wide, and are canted to shed water. Pickets are closely spaced and run between the rails rather than alongside them. Traditional pickets were rarely turned, unlike those being used improperly today.

Flooring is commonly 5/4" thick, 3" to 4" wide, tongue-and-groove fir, painted. Steps commonly consist of similar, wider material.

Painted wood skirt boards cover the rim joints, giving the porch edge a finished look. The flooring overhangs the skirt by at least 1 inch.

Posts are often carved, turned or tapered, and are often the most uniquely detailed part of a porch.

Wood trellises fill the spaces between piers, with the lattice contained within a frame and set back from the piers. Because wood rots from close proximity to wet ground, certain plastic trellis material can be appropriate here.

Piers of brick, stone or decorative block raise the porch above the ground, allowing air to circulate beneath the floor.
D.4 Porch Railings

The Preservation Board strongly prefers to keep original porch railings intact or, if conditions require, to have the originals replicated as closely as possible in both style, scale and material. Railings on historic buildings were often very elaborate and unique. The first drawing below shows a traditional railing with an average degree of character for its time. Unfortunately, even this basic railing is far more detailed than most railings built today. The subsequent drawings depict some modern styles, although a few could be appropriate to earlier specific styles, as noted.

A traditional railing has substantial, well-detailed newel posts and rails that reflect skilled craftsmanship. The rails are thick, and canted to shed water. The pickets are closely spaced, with gaps only about 1½ to 2 times the picket width. They fit between the rails, rather than attaching to the sides as in modern railings.

This modern railing lacks any of the detail that would give it character. The pickets are spaced about 4 inches on center to meet code requirements, much wider than on traditional railings. This railing is not appropriate to an historic building.

Turned pickets were not common on historic porches in Rochester, except on some houses of the Queen Anne style. But those pickets had more variety in the turnings than pickets commonly available today. Pickets sold in home improvement stores may be appropriate to interior stairs but not to porches. And, as noted above, traditional pickets were spaced closely together, not 4 inches apart.
D.5 Porch Railings Continued

The pickets on this modern railing are attached to the sides of the rails, rather than connecting between them as on a traditional railing. On the newel post, the cap is flat and won't shed water.

This metal railing would be appropriate on a Tudor Revival or Moderne house, but not as a replacement railing on houses of other styles.

An enclosed railing can be appropriate to Colonial Revival, Arts & Crafts and Four Square houses, but such a rail would be discouraged elsewhere because it lacks character and openness. When used on an historic house, this type of railing was quite broad, perhaps 8 to 12 inches, with a canted wood cap.
D.6 Alternate Porch Materials

Several man-made materials for porches, meant to replace traditional materials, have entered the market in recent years. Of those available in 2005, some can be appropriate for use on some historic buildings. As the market matures, other appropriate products may become available.

**Composite lumber** products combine wood and plastic, some of which is reclaimed or recycled, and are intended to be used in place of wood. Most products are homogenous throughout, and cut and drill much like wood, although some don't shape or rout as neatly as wood. Manufacturers assert that these materials are durable and won't degrade from moisture, rot, insects or sunlight. They are free of splinters, which makes them attractive for use on railings, decks and steps.

Manufacturers have proprietary formulations for their composite products, so each one looks and acts somewhat uniquely. As a result, these products are not interchangeable and are not applicable everywhere. Close attention must be paid to a manufacturer's recommendations and warranty limitations.

Composite deck boards come in common lumber sizes, and are dressed on four sides like stock lumber (the edges of dressed boards are slightly rounded). An industry leader today is Trex®. When used on a deck, composite boards must be spaced with gaps between, because the material expands and contracts from temperature changes. Boards like these don't mimic traditional tongue-and-groove porch boards, and are therefore not appropriate for an historic porch.

One composite product, TenduraPlank®, expands and contracts less than others, and is made as tongue-and-groove boards specifically for porches. It comes in traditional widths, but in a thickness of 7/8” instead of the more traditional 5/4”. The standard product comes primed and ready for painting, while another version is a solid that comes in battleship gray. The material is only for covered porches, not for open decks. It appears to be appropriate for use on historic buildings.

Some manufacturers of composite materials make railing systems for porches and decks, with preformed top and bottom rails, newel posts, post caps and pickets. These are typically assembled like a kit. In fact, some brands are sold as kits, with all the parts for a given length of railing included in one box.

Current colors for composite railings and deck boards include earth tones in browns, grays and tans. These colors would not be appropriate on porches that were historically painted in colors or whites, such as in the Queen Anne style, but may be okay on buildings with natural tones, such as Arts & Crafts houses. The manufacturers say that the material can be painted and that the paint holds well. But because paint is not required for weather protection, few homeowners could be expected to choose this option, or choose to repaint when needed. Railing components are available in white, but they are clad in white vinyl rather than being homogenous, so they can't be milled or connected like wood, and they look and construct like fully vinyl railing systems. These are not appropriate for most historic structures because the pickets are pre-spaced wider than a traditional railing, the connections between components are exposed, and the finish sheen appears artificial.
Alternate Porch Materials continued

Cellular polyvinyl chloride (PVC) is another man-made material being used in porch components. Depending on how they are manufactured, some PVC products can be cut and painted like wood. Various companies such as Azek® and Duraboard® make trim board, bead board and millwork, while a few like HB&G® make porch railings, newel posts and columns. Other companies like Monarch® make porch parts of composite material clad in PVC. These can't be cut or routed without exposing the interior composite. Monarch's newel posts are hollow PVC and aren't structurally strong by themselves, so they must be slipped over wood posts.

Railing systems reviewed for these guidelines came with rails predrilled to set the pickets at 4 inches on center, which is too wide for historic railings. Pickets were available in only two styles--square or turned--and in one thickness only. The railings attach to the newel posts with visible brackets, which cause the railings to look artificial. The artificiality is amplified by the finish, which is overly glossy relative to painted wood. As a result, very few PVC railing systems reviewed in 2005 would be appropriate for use on historic buildings.

Pressure treated wood, while technically not man-made, can be considered an alternate material because it is commonly used in railing systems and porch posts of the same configurations as composite or PVC systems. It is also widely promoted by home improvement stores as maintenance free as are other alternate materials. It is treated to delay decay and, as such, works best in moist areas. Because it does not hold paint as well as untreated wood, pressure treated wood is appropriate for use where it is not visible or where a painted finish is unnecessary. In addition, most pressure treated wood is of utility grade that often contains knots, checks and splits, so it is inappropriate for historically correct railings, porch floors and steps.

Caution!
Exercise caution when considering these railing systems for use on an historic building. Most systems are not of any defined style such as Greek Revival, Queen Anne or Italianate, but are instead stylistic hybrids. While the top and bottom rails may be right for some buildings, the pickets and posts may not be. Nearly every picket available today is square in cross section and in one size only, which won't fit most historic buildings. Some pickets come in turned shapes but, again, these aren't appropriate for most buildings. Also inappropriate are railing systems in kit form, where the pickets come spaced at 4 inches on center, far wider than on traditional railings.

Likewise, the newel posts come in only a few styles and sizes, which would fit relatively few buildings. The posts available today tend to be too narrow to fit the proportions of an historic porch. Just as the style of a railing should be appropriate to the style of a building, its scale should be appropriate to the scale of the building. For example, large traditional buildings have proportionally large parts. One reason that many new houses lack the character of traditional buildings is that their parts are often undersized, not having kept pace with the inflation in house sizes.

When considering style, size and color, the railing systems reviewed for these guidelines would best fit houses of the Arts & Crafts style, and the stylistic subsets of Craftsman and Bungalow, but only if the pickets are tightly spaced.
D.7 Decks

Decks are not common features of historic buildings, and are rarely appropriate in a preservation district. Traditional buildings had a porch, with a roof, railing, columns and materials that visually tied it to the building. Conversely, a typical deck, like that below, lacks these features and usually appears incongruous to the building. Also, because a deck is uncovered and unprotected from the weather, it is usually built of pressure treated lumber, a material that is usually thicker and wider than traditional wood components and is usually left unpainted. The few available stock railings and spindles are almost always inappropriate to a traditional building.

Under certain conditions, though, decks can fit well enough to be appropriate. As shown below, a deck with railings, steps and flooring whose details and materials are consistent with historic porches can fit in a district. Decks of this sort should be considered roofless porches, should be of similar size and configuration as historic porches, and should be connected to the building rather than floating in the yard. Building owners should be aware, though, that uncovered, non-pressure treated wood may deteriorate rapidly. An awning can be an appropriate solution to this problem.
D.8 Decks continued

A deck without railings can be appropriate in a preservation district. Per the state building code in 2005, when a deck's floor surface is less than 30" above grade, railings are not required. Homeowners should be aware, though, that a deck user could fall off its open edges. As shown below, planters and other large objects can be used to keep people away from the edges. At steps, a handrail is required by the building code if there are 2 or more risers.

To be most appropriate in a preservation district, the floor surface should be as low as possible, and rim joists should be trimmed with painted wood to match details of the building. Pressure-treated deck floor boards can be appropriate, but should be 4" or 6" wide and colored to minimize visual conflict with the building. As shown below, a deck which fits into a corner of a building can be more congruous with the building than a deck projecting into the yard. Note also that the handrail at the steps is attached to the building, rather than standing free at the opposite side of the steps.