MATERIAL SYMBOLS
One important aspect of the working drawings is to indicate the extent or shape of the various materials used in the construction. Due to the complexity of the different materials and components in building projects, a simplified method of noting the materials and indicating their extent has been devised. This method, commonly known as poches, consists of using lines, dots or other marks to make a pattern to represent the different materials and indicate their extent in the drawings.

Like other aspects of working drawings, the poches used in the drawings vary between regions and offices. Thus, the poches used in the drawings must be defined by a legend, typically located on the title sheet, to have legal definition in the contract. Once defined, each unique poche becomes a symbol for the material represented and need not be further noted each time it occurs in the drawings. Some poches are not unique; that is, the same poche is used for more than one material. In this case, a note is necessary to define the specific material intended and the poche is used to indicate only the extent of the material. Generally, only unique poches are used to show materials drawn in section to indicate materials that have been sliced. The poches that might indicate more than one material are used on surfaces drawn in elevation to indicate the extent of surface material or desired surface pattern.

Although the poches themselves are not universal, several general concepts concerning their use are accepted by most professionals. Generally, the smaller the scale of the drawing the simpler the poche must be in order to reproduce clearly on the print. The poche for brick, for example, might include an indication of the joints between individual bricks in large scale drawings where the coursing is important to the drawings. On the small scale floor plans, the joint between individual bricks is omitted as nonessential to the drawing. Avoid using a poche on small areas or on small scale drawings where the distinctive features of the poche cannot be drawn large enough to print clearly.

Within the limit of time spent on the drawings, the material poches should be indicative of the materials they represent. This will be particularly true of those which represent surface conditions. Poches used to indicate brick, wood siding, or precast assemblies in elevation should indicate the location of joints as the scale of the drawing allows.

Generally, poche all materials shown in section in any view. This will help to distinguish material that have been sliced by the hypothetical section cut from those that are behind the section cut and are drawn in elevation. These views, which are primarily drawn to show the placement of materials, require clear contrast between different parts, even when they are of the same material, to clearly define the construction. For this reason, it is a good practice to poche adjacent materials in opposite directions to identify the separate pieces.

Figure 17. Partial detail illustrating the use of poches.
For those surfaces seen in elevation use poches only where it is necessary to indicate the extent of material; such as distinguishing the area that is to be faced with ceramic tile from areas to be paneled, or to show the pattern of the surface material, such as special brick coursing, etc. Unnecessary poches on surfaces should be avoided. In a symmetrical elevation view, the poches on one side of the center line often can be omitted if the materials, their extent, and pattern are understood from the poches on the other side. On large surfaces, a light diagonal line that does not conflict with other important lines can be used to limit the poche to a typical area. When a series of identical features is shown in a drawing, it is seldom necessary to poche more than one typical unit and then simply reference to the others by note.

Poches are the final additions to the drawings and are typically drawn on the back of the sheet to avoid smearing the drawing and to facilitate corrections, should they be necessary. The poche is drawn with the lightest line weight used in the drawings. In fact, many professionals advocate letting the poche "fade out" near the center when it is used on relative large areas. If this is done, the edges of the poche which indicate the extent of the material must be distinct and faded areas should be of a nongeometric shape, to eliminate any possibility of appearing as construction features on the surface. When notes must be placed on a poched area, omit the poche in the area of the note using one of the above methods of partial poches to insure that the note can be read without difficulty. Also take care to insure the poche does not obscure important dimensions, extension lines, leader lines, grid lines or other important references to the drawing.

The material poches shown on the following sheets were selected as being those that are not common in the Northwest. Note that a special system of symbols are used to distinguish types of partitions shown in the small scale plan views. These symbols actually identify a type of wall framing or construction; thus, they often indicate more than a single material. Also note that the poches used for materials shown in section often varies from the poche for the same material shown in elevation. This helps clarify the distinction between the two types of view and also makes the poches more indicative of the materials they represent. Finally, note that the poche for some materials varies with the scale of the drawing to insure that it will reproduce clearly on the print.
NOTATIONAL SYSTEMS
In addition to the drawing titles and subtitles already mentioned, other written information is required on the drawings to identify materials or aspects of the construction that is not conveyed by the symbols and poches used in the drawing. Generally, these notes serve four functions in the drawings:

1. Notes are used to clarify line codes, symbols, and poches which are not complete and discrete in themselves, and to direct the contractor to the specific section of the specifications that relates to the construction.

2. Notes are used to describe or clarify mandatory characteristics of the construction shown in the drawings.

3. Notes are used to cross reference drawings.

4. Notes are used for nominal materials, as part of the dimensioning system.

Notes that are used to cross reference to the specifications should be as brief as possible; for example, the poche for finish lumber shown in the drawings is sufficient in itself if only one type of finish lumber is used in the project. However, if both oak and cedar are used as finish lumber in the project, a note used with the finish lumber poche indicating "OAK" would be necessary to direct the contractor to the correct specific specification. If more than one type of oak is used in the project, for instance, red oak and white oak, the note must be still more specific as, "RED OAK". Thus, the more types of a specific material that are used in a project, the more descriptive the note must be. Most descriptive notes can be typically stated in a few words, or a single word; however, the drafter must be familiar with the project specifications to determine the best form for the note and insure that the same terminology is used in both the drawings and specifications. As both the drawings and specifications are parts of the same contract, the note, "SEE SPECIFICATIONS", should always be considered superfluous and thus avoided on the drawings.

The quality of materials and workmanship are covered in the specifications. Thus, the descriptive notes on the drawings should use only generic names of the materials; for example "GYPSUM WALL BOARD", and not the name of a particular manufacturer's product, such as "SHEETROCK". This procedure allows for open specifications which take advantage to competitive pricing between manufacturers. It also generalizes the large scale detail drawings, resulting in a smaller number of more applicable detail drawings. Further, alternates and changes to the construction can be achieved through changes in the specifications without revisions to the drawings.

Generally, each item covered by the specifications should be located in the drawings. For example, if the specifications call for a particular reglet in a flashing specification, the reglet should be located and noted in the drawings. For this reason, the notes that clarify poches should be descriptive rather than directive; for example, "INTERLOCKING WEATHER STRIP" rather than, "PROVIDE WEATHER SEAL." When it is necessary to make the drawings more understandable, the purpose of the material may be added to the note. For example, "MORTAR SETTING BED" may be used rather than simply "MORTAR"; however, avoid noting only the purpose, such as, "SETTING BED."

Some notes of instruction are often necessary to identify a certain condition that must be met in the construction. Such a note should state the mandatory characteristic intended when that characteristic is difficult to display in the drawings. "SLOPE FLOOR TO DRAIN" or "MATCH EXISTING TRIM", are examples of such notes. Again, care must be taken that the note is appropriate to the drawings and is not a question of workmanship that would be better covered in the specifications. If directive notes are lengthy or refer to more than one specific location, place them in a prominent location near the relevant drawings under a heading titled "NOTES".

Notes that are used to cross reference other drawings should be located at the point to be cross referenced and include the title and sheet number of the referenced drawings, for example, "SEE PARTIAL ENTRY PLAN, SHEET A-16". A reference note should not be used if a cross reference symbol already has been adopted for this purpose.
By indicating a material of a particular size, some notes become part of the dimensioning system. Generally, this form of note states the nominal size of the material. If a particular constructed dimension is required, dimension and extension lines should be used instead of a note to indicate the dimension. The dimensional note is only necessary if more than one nominal size of a particular material is used in the project. Thus, to note that 1/2" plywood sheathing is to be used is important only if more than one size of plywood sheathing is used. The use of dimensioned notes is discussed further in the section on dimensioning.

**GROUPING NOTES**

Typically, the notes are added to the drawings after they have been dimensioned as there is a greater flexibility in the location of the notes. However, the note should be located as close to the point of application as possible. The intended construction will be made clearer if the notes are grouped together and separated from the remainder of the notes. In a typical wall section, for example, the notes identifying the roof assembly; would be grouped separately from those describing the wall construction, and these, in turn, from the descriptive notes for the floor system. For a continuous note of more than one line, the space between lines should be one-half the height of the lettering. Individual notes should be separated by at least the height used for a line of lettering and groups of notes by sufficient space to insert an additional line of lettering.

**LEADER LINES**

Leader lines are straight or curved lines leading from a note to the applying feature. For legal definition, the leader must begin at the first or last letter in a note but never from the middle, unless the entire note is enclosed in a bracket. The feature indicated by the note is the one at the tip of the leader, typically indicated by the tip of an arrow head, or by an opaque dot. Multiple locations can be indicated by multiple indicators or by multiple leaders.

Figure 18. Detail illustrating the use and grouping of notes.
Two basic types of leaders are commonly used: one that is used in sectioned drawings to indicate specific locations, and one used for materials shown in elevation, indicating continuous conditions. In the first case, the leader indicates a material, typically shown in section or edge view, with the note placed outside the drawing. In the second case, the note often is placed on the surface noted, and leaders are drawn from both ends of the note to indicate the continuous surface.

It is a good practice to begin the leader horizontally from the note and then break or curve the leader to the point to be referenced. In this manner, the note that the leader relates to cannot be confused. To avoid the leader being mistaken as part of the construction or other line, the leader should be drawn at a unique angle from the remainder of the lines in the drawing. When possible, avoid having the leader intersect the object at an extreme acute angle so that the specific material indicated is clear and the arrowhead is not obscured by other parts of the drawing.

If the individual notes in a group are aligned on the sheet in an organized manner, there will be less chance of an individual note being overlooked. Thus, the notes identifying the materials in a wall section are aligned vertically with the beginning of each note the same distance from the wall. Where the notes relate to a horizontal assembly, it will be convenient to offset each note by a certain distance staggering them along an imaginary slanted line.

Individual notes within a group should be arranged in the same sequence as the materials they identify in order to avoid the leader lines crossing. Thus, for example, the topmost note in a group of notes for a roof assembly should describe the topmost material in the roof construction and so on through the assembly. For a wall section, the notes might begin with the exterior material and continue sequentially through the construction to the interior surface.

Figure 19. The use of leader lines with notes.