

Customer Name: \_\_\_\_\_ Date: \_\_\_\_\_

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Salesman: \_\_\_\_\_

Construction Start Date: \_\_\_\_\_

(Please print clearly and legibly)

## Job Spec's

### Interior:

- Studwall-**
- 2 x 6
  - 2 x 4
  - other \_\_\_\_\_

- Headers-**
- LVL
  - 2 x 10
  - 2 x 8
  - other \_\_\_\_\_

### Exterior:

- Studwall-**
- 2 x 6
  - 2 x 4
  - other \_\_\_\_\_

### Roofing-

- Shingles
- Arch Lam       30 yr.    40 yr.    50 yr
  - Arch Fiberglass
  - 3 Tab               Other \_\_\_\_\_

- Headers-**
- LVL
  - 2 x 10
  - 2 x 8
  - Other \_\_\_\_\_

### Sheathing-

- 1/2" Fir
- 5/8" Fir
- 7/16" OSB
- Other \_\_\_\_\_

### MISC. NOTES:

### Sheathing-

- 1/2" Fir
- 1/2" Pine
- 7/16" OSB
- other \_\_\_\_\_

### Drip-edge-

- 8"
- 5"
- Alum    Wht    Brn
- other \_\_\_\_\_

### Siding-

- Clear Clapboard
- Primed Clap    FJ
- Hardie-Plank (Cmntclap)
- Vinyl Siding
- other \_\_\_\_\_

- 2 x 8
- other \_\_\_\_\_

### Ice & Water Shield

- Grace
- Barrier
- other \_\_\_\_\_

### Trim-

- PVC
- FJ Primed Pine (Clear)
- Primed Pine
- other \_\_\_\_\_

### Felt Paper

- 15 lb.
- 30 lb.

## Rafter Length Table

| 21 FEET   |           |               |           |               | 22 FEET   |           |               |           |               | 23 FEET   |           |               |           |               | 24 FEET   |           |               |           |               |
|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|
| Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               |
|           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |
| 1         | 10        | 6 3/8         | 14        | 10 1/2        | 1         | 11        | 1/2           | 15        | 7             | 1         | 11        | 6 1/2         | 16        | 3 1/2         | 1         | 12        | 1/2           | 17        | 0             |
| 2         | 10        | 7 3/4         | 14        | 11 3/8        | 2         | 11        | 1 3/4         | 15        | 8             | 2         | 11        | 7 7/8         | 16        | 4 1/2         | 2         | 12        | 1 7/8         | 17        | 1 1/8         |
| 3         | 10        | 10            | 15        | 1             | 3         | 11        | 4 1/8         | 15        | 9 1/2         | 3         | 11        | 10 3/8        | 16        | 6 1/8         | 3         | 12        | 4 1/2         | 17        | 2 3/4         |
| 4         | 11        | 7/8           | 15        | 3 1/8         | 4         | 11        | 7 1/8         | 15        | 11 7/8        | 4         | 12        | 1 1/2         | 16        | 8 5/8         | 4         | 12        | 7 3/4         | 17        | 5 1/4         |
| 5         | 11        | 4 1/2         | 15        | 5 7/8         | 5         | 11        | 11            | 16        | 2 3/4         | 5         | 12        | 5 1/2         | 16        | 11 5/8        | 5         | 13        | 0             | 17        | 8 3/8         |
| 6         | 11        | 9             | 15        | 9             | 6         | 12        | 3 5/8         | 16        | 6             | 6         | 12        | 10 3/8        | 17        | 3             | 6         | 13        | 5             | 18        | 0             |
| 7         | 12        | 2             | 16        | 3/4           | 7         | 12        | 8 7/8         | 16        | 10            | 7         | 13        | 3 7/8         | 17        | 7 1/8         | 7         | 13        | 10 3/4        | 18        | 4 3/8         |
| 8         | 12        | 7 1/2         | 16        | 5             | 8         | 13        | 2 5/8         | 17        | 2 3/8         | 8         | 13        | 9 7/8         | 17        | 11 3/4        | 8         | 14        | 5             | 18        | 9 1/8         |
| 9         | 13        | 1 1/2         | 16        | 9 3/4         | 9         | 13        | 9             | 17        | 7 3/8         | 9         | 14        | 4 1/2         | 18        | 5             | 9         | 15        | 0             | 19        | 2 1/2         |
| 10        | 13        | 8             | 17        | 2 7/8         | 10        | 14        | 3 7/8         | 18        | 3/4           | 10        | 14        | 11 3/4        | 18        | 10 5/8        | 10        | 15        | 7 1/2         | 19        | 8 3/8         |
| 11        | 14        | 3             | 17        | 8 3/8         | 11        | 14        | 11 1/8        | 18        | 6 1/2         | 11        | 15        | 7 1/4         | 19        | 4 5/8         | 11        | 16        | 3 3/8         | 20        | 2 5/8         |
| 12        | 14        | 10 3/16       | 18        | 2 1/4         | 12        | 15        | 6 11/16       | 19        | 5/8           | 12        | 16        | 3 1/8         | 19        | 11            | 12        | 16        | 11 5/8        | 20        | 9 3/8         |
| 13        | 15        | 5 3/4         | 18        | 8 7/16        | 13        | 16        | 2 5/8         | 19        | 7 1/8         | 13        | 16        | 11 7/16       | 20        | 5 13/16       | 13        | 17        | 8 5/16        | 21        | 4 1/2         |
| 14        | 16        | 1 5/8         | 19        | 3             | 14        | 16        | 10 13/16      | 20        | 2             | 14        | 17        | 8 1/16        | 21        | 1             | 14        | 18        | 5 1/4         | 22        | 0             |

| 25 FEET   |           |               |           |               | 26 FEET   |           |               |           |               | 27 FEET   |           |               |           |               | 28 FEET   |           |               |           |               |
|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|
| Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               |
|           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |
| 1         | 12        | 6 1/2         | 17        | 8 1/2         | 1         | 13        | 1/2           | 18        | 5             | 1         | 13        | 6 1/2         | 13        | 1 1/2         | 1         | 14        | 5/8           | 19        | 10            |
| 2         | 12        | 8             | 17        | 9 5/8         | 2         | 13        | 2 1/8         | 18        | 6 1/4         | 2         | 13        | 8 1/4         | 13        | 2 3/4         | 2         | 14        | 2 1/4         | 19        | 11 1/4        |
| 3         | 12        | 10 5/8        | 17        | 11 3/8        | 3         | 13        | 4 7/8         | 18        | 8             | 3         | 13        | 11            | 13        | 4 5/8         | 3         | 14        | 5 1/4         | 20        | 1 1/4         |
| 4         | 13        | 2 1/8         | 18        | 2             | 4         | 13        | 8 1/2         | 18        | 10 3/4        | 4         | 14        | 2 7/8         | 14        | 7 1/2         | 4         | 14        | 9 1/8         | 20        | 4 1/8         |
| 5         | 13        | 6 1/2         | 18        | 5 1/4         | 5         | 14        | 1             | 19        | 2 1/8         | 5         | 14        | 7 1/2         | 14        | 11            | 5         | 15        | 2             | 20        | 7 7/8         |
| 6         | 13        | 11 3/4        | 18        | 9             | 6         | 14        | 6 1/2         | 19        | 6             | 6         | 15        | 1             | 15        | 3             | 6         | 15        | 7 7/8         | 21        | 0             |
| 7         | 14        | 5 3/4         | 19        | 1 1/2         | 7         | 15        | 3/4           | 19        | 10 5/8        | 7         | 15        | 7 3/4         | 15        | 7 3/4         | 7         | 16        | 2 5/8         | 21        | 5             |
| 8         | 15        | 1/4           | 19        | 6 1/2         | 8         | 15        | 7 1/2         | 20        | 3 7/8         | 8         | 16        | 2 3/4         | 16        | 1 1/8         | 8         | 16        | 9 7/8         | 21        | 10 5/8        |
| 9         | 15        | 7 1/2         | 20        | 1/8           | 9         | 16        | 3             | 20        | 9 3/4         | 9         | 16        | 10 1/2        | 16        | 7 3/8         | 9         | 17        | 6             | 22        | 5             |
| 10        | 16        | 3 1/4         | 20        | 6 1/4         | 10        | 16        | 11 11/16      | 21        | 4 1/16        | 10        | 17        | 7             | 17        | 2             | 10        | 18        | 2 5/8         | 22        | 11 7/8        |
| 11        | 16        | 11 1/2        | 21        | 13/16         | 11        | 17        | 7 5/8         | 21        | 10 15/16      | 11        | 18        | 3 3/4         | 18        | 9             | 11        | 18        | 11 7/8        | 23        | 7 1/8         |
| 12        | 17        | 8 1/8         | 21        | 7 13/16       | 12        | 18        | 4 5/8         | 22        | 6 3/16        | 12        | 19        | 1 1/8         | 19        | 4 1/2         | 12        | 19        | 9 5/8         | 24        | 3             |
| 13        | 18        | 5 1/8         | 22        | 3 1/4         | 13        | 19        | 2             | 23        | 1 15/16       | 13        | 19        | 10 13/16      | 19        | 5/8           | 13        | 20        | 7 11/16       | 24        | 11 5/16       |
| 14        | 19        | 2 1/2         | 22        | 11            | 14        | 19        | 11 11/16      | 23        | 6 7/16        | 14        | 20        | 8 15/16       | 20        | 9             | 14        | 21        | 6 1/8         | 25        | 8             |

| 29 FEET   |           |               |           |               | 30 FEET   |           |               |           |               | 31 FEET   |           |               |           |               | 32 FEET   |           |               |           |               |
|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|
| Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               |
|           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |
| 1         | 14        | 6 5/8         | 20        | 6 1/2         | 1         | 15        | 5/8           | 21        | 3             | 1         | 15        | 6 5/8         | 21        | 11 1/2        | 1         | 16        | 5/8           | 22        | 8             |
| 2         | 14        | 8 3/8         | 20        | 7 3/4         | 2         | 15        | 2 3/8         | 21        | 4 3/8         | 2         | 15        | 8 1/2         | 22        | 7/8           | 2         | 16        | 2 1/2         | 22        | 9 1/2         |
| 3         | 14        | 11 1/2        | 20        | 9 7/8         | 3         | 15        | 5 1/2         | 21        | 6 1/2         | 3         | 15        | 11 5/8        | 22        | 3 1/8         | 3         | 16        | 5 7/8         | 22        | 11 5/8        |
| 4         | 15        | 3 1/2         | 21        | 7/8           | 4         | 15        | 9 3/4         | 21        | 9 5/8         | 4         | 16        | 4 1/8         | 22        | 6 3/8         | 4         | 16        | 10 3/8        | 23        | 3             |
| 5         | 15        | 8 1/2         | 21        | 4 3/4         | 5         | 16        | 3             | 22        | 1 1/2         | 5         | 16        | 9 1/2         | 22        | 10 3/8        | 5         | 17        | 4             | 23        | 7 1/4         |
| 6         | 16        | 2 5/8         | 21        | 9             | 6         | 16        | 9 1/4         | 22        | 6             | 6         | 17        | 4             | 23        | 3             | 6         | 17        | 10 5/8        | 24        | 0             |
| 7         | 16        | 9 5/8         | 22        | 2 1/8         | 7         | 17        | 4 1/2         | 22        | 11 3/8        | 7         | 17        | 11 1/2        | 23        | 8 1/2         | 7         | 18        | 6 3/8         | 24        | 5 3/4         |
| 8         | 17        | 5 1/8         | 22        | 8             | 8         | 18        | 3/8           | 23        | 5 3/8         | 8         | 18        | 7 5/8         | 24        | 2 3/4         | 8         | 19        | 2 3/4         | 25        | 1/8           |
| 9         | 18        | 1 1/2         | 23        | 2 5/8         | 9         | 18        | 9             | 24        | 1/8           | 9         | 19        | 4 1/2         | 24        | 9 3/4         | 9         | 20        | 0             | 25        | 7 3/8         |
| 10        | 18        | 10 3/8        | 23        | 9 3/4         | 10        | 19        | 6 3/8         | 24        | 7 1/2         | 10        | 20        | 2 1/4         | 25        | 5 3/8         | 10        | 20        | 10            | 26        | 3 1/4         |
| 11        | 19        | 8             | 24        | 5 1/4         | 11        | 20        | 4 1/4         | 25        | 3 3/8         | 11        | 21        | 3/8           | 26        | 1 1/2         | 11        | 21        | 8 1/2         | 26        | 11 5/8        |
| 12        | 20        | 6 1/16        | 25        | 1 3/8         | 12        | 21        | 2 9/16        | 25        | 11 3/4        | 12        | 21        | 11            | 26        | 10 1/8        | 12        | 22        | 7 1/2         | 27        | 8 1/2         |
| 13        | 21        | 4 1/2         | 25        | 10            | 13        | 22        | 1 3/8         | 26        | 8 11/16       | 13        | 22        | 1 1/4         | 27        | 7 3/8         | 13        | 23        | 7 1/16        | 28        | 6 1/16        |
| 14        | 22        | 3 3/8         | 26        | 7             | 14        | 23        | 9/16          | 27        | 6             | 14        | 23        | 9 13/16       | 28        | 5             | 14        | 24        | 7             | 29        | 4             |

| 33 FEET   |           |               |           |               | 34 FEET   |           |               |           |               | 35 FEET   |           |               |           |               | 36 FEET   |           |               |           |               |
|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|-----------|-----------|---------------|-----------|---------------|
| Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               | Inch Rise | Com       |               | Hip       |               |
|           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |           | <i>ft</i> | <i>inches</i> | <i>ft</i> | <i>inches</i> |
| 1         | 16        | 6 5/8         | 23        | 4 1/2         | 1         | 17        | 3/4           | 24        | 1             | 1         | 17        | 6 3/4         | 24        | 9 1/2         | 1         | 18        | 3/4           | 25        | 6             |
| 2         | 16        | 8 3/8         | 23        | 6             | 2         | 17        | 2 3/4         | 24        | 2 1/2         | 2         | 17        | 8 7/8         | 24        | 11            | 2         | 18        | 2 7/8         | 25        | 7 5/8         |
| 3         | 17        | 0             | 23        | 8 1/4         | 3         | 17        | 6 1/4         | 24        | 4 7/8         | 3         | 18        | 1/2           | 25        | 1 1/2         | 3         | 18        | 6 5/8         | 25        | 10 1/8        |
| 4         | 17        | 4 3/4         | 23        | 11 3/4        | 4         | 17        | 11            | 24        | 8 1/2         | 4         | 18        | 5 3/8         | 25        | 5 1/4         | 4         | 18        | 11 7/8        | 26        | 1 7/8         |
| 5         | 17        | 10 1/2        | 24        | 4 1/8         | 5         | 18        | 5             | 25        | 7/8           | 5         | 18        | 11 1/2        | 25        | 9 3/4         | 5         | 19        | 6             | 26        | 6 5/8         |
| 6         | 18        | 5 5/8         | 24        | 9             | 6         | 19        | 1/8           | 25        | 6             | 6         | 19        | 6 7/8         | 26        | 3             | 6         | 20        | 1 1/2         | 27        | 0             |
| 7         | 19        | 1 3/8         | 25        | 2 7/8         | 7         | 19        | 8 3/8         | 26        | 1/8           | 7         | 20        | 3 3/8         | 26        | 10 1/4        | 7         | 20        | 10 1/4        | 27        | 6 1/2         |
| 8         | 19        | 10            | 25        | 9 1/2         | 8         | 20        | 5 1/8         | 26        | 6 7/8         | 8         | 21        | 3/8           | 27        | 4 1/4         | 8         | 21        | 7 1/2         | 28        | 1 5/8         |
| 9         | 20        | 7 1/2         | 26        | 5             | 9         | 21        | 3             | 27        | 2 5/8         | 9         | 21        | 10 1/2        | 28        | 1/4           | 9         | 22        | 6             | 28        | 9 3/4         |
| 10        | 21        | 5 7/8         | 27        | 1 1/8         | 10        | 22        | 1 1/2         | 27        | 10 7/8        | 10        | 22        | 9 3/8         | 28        | 8 3/4         | 10        | 23        | 5 1/8         | 29        | 6 5/8         |
| 11        | 22        | 4 5/8         | 27        | 9 3/4         | 11        | 23        | 7/8           | 28        | 7 3/4         | 11        | 23        | 8 7/8         | 29        | 5 7/8         | 11        | 24        | 5             | 30        | 4             |
| 12        | 23        | 4             | 28        | 6 7/8         | 12        | 24        | 1/2           | 29        | 5 1/4         | 12        | 24        | 9             | 30        | 3 5/8         | 12        | 25        | 5 1/2         | 31        | 2             |
| 13        | 24        | 4 1/2         | 29        | 4 5/8         | 13        | 25        | 7/8           | 30        | 3 1/4         | 13        | 25        | 9 3/4         | 31        | 1 7/8         | 13        | 26        | 6 5/8         | 32        | 5/8           |
| 14        | 25        | 4 1/4         | 30        | 3             | 14        | 26        | 1 1/2         | 31        | 2             | 14        | 26        | 10 3/4        | 32        | 1             | 14        | 27        | 7 7/8         | 33        | 0             |



**ACQ (Ammonium Copper Quaternary)**

A commonly used pressure treatment wood preservative.

**ACZA (Ammoniacal Copper Zinc Arsenate)**

A new pressure-treated wood preservative.

**Adhesion**

The ability of a waterproof material to bond to a substrate or other material during movement or stress.

**Adhesive Strength**

The ability of sealants to bond to a particular substrate, including adhesion during substrate movement.

**Aggregate**

(1) crushed stone, crushed slag, or water-worn gravel used for surfacing a built-up roof; (2) any granular mineral material.

**Algae Discoloration**

A type of roof discoloration caused by algae. Commonly called fungus growth.

**Alligatoring**

The cracking of the surfacing bitumen on a built-up roof, producing a pattern of cracks similar to an alligator's hide; the cracks may not extend through the surfacing bitumen.

**AAMA (American Architectural Manufacturers Association)**

AAMA is an industry organization - a source performance standards, product certification, and educational programs for windows, doors and skylights.

**Application Rate**

The quantity (mass, volume or thickness) of material applied per unit area.

**Architectural Shingles** See Laminated Shingles.

**Aromatic Solvents**

Hydrocarbon solvents comprised of organic compounds which contain an unsaturated ring of carbon atoms, including benzene, naphthalene and their derivatives.

**Asbestos**

A group of natural fibrous impure silicate materials.

**Asphalt**

A waterproofing agent applied to roofing materials during manufacture. Based on natural oil or a petroleum component called bitumen, which liquefies when heated and is impervious to water.

**Asphalt Felt**

An asphalt-saturated felt.

**Asphalt Mastic**

A mixture of asphaltic material and graded mineral aggregate that can be poured when heated, but requires mechanical manipulation to apply.

**Asphalt Plastic Roofing Cement**

An asphalt-based cement used to bond roofing materials. Also known as flashing cement or mastic; should conform to ASTM D-4586.

**Asphaltite**

A natural asphalt found below ground level.

**ASTM**

American Society for Testing and Materials. A voluntary organization concerned with development of consensus standards, testing procedures and specifications.

**Back Nailing**

The practice of blind-nailing roofing felts to a substrate in addition to hot-mopping to prevent slippage.

**Back Surfacing**

Fine mineral matter applied to the back side of shingles to keep them from sticking.

Back water lap joint

A non-water shedding seam between building materials.

**Baffles**

Device to help achieve a ventilation space between insulation and roof sheathing. It helps ensure air flow from the eave vents in attics and cathedral ceilings.

**Bald Roof**

A smooth-surfaced roof.

**Band Board**

Perimeter floor joist that sits atop the sill in a wood floor framing system.

**Band Joist**

Vertical member that forms the perimeter of a floor system in which the floor joists tie in. Also known as the rim joist.

**Base Flashing**

That portion of the flashing attached to or resting on the deck to direct the flow of water onto the roof covering. Blisters or bubbles that may appear on the surface of asphalt roofing after installation.

**Base Ply**

The bottom or first ply in a built-up roofing membrane when additional plies are to be subsequently installed.

**Base Sheet**

A product intended to be used as a base ply in a built-up roofing system.

**Bead**

A small amount of mastic, caulking or flashing cement applied to the waterproofing membrane at a termination, generally the width of a 1/2" caulking gun orifice.

**Bitumen**

Any of various flammable mixtures of hydrocarbons and other substances, occurring naturally or obtained by distillation from coal or petroleum, that are a component of asphalt and tar and are used for surfacing roads and for waterproofing.

**Bituminized**

Impregnated with bitumen. Example: bituminized fiber pipe.

**Bituminous**

Containing or treated with bitumen.

**Bituminous Emulsion**

(1) a suspension of minute globules of bituminous material in water or in an aqueous solution; (2) a suspension of minute globules of water or of an aqueous solution in a liquid bituminous material (invert emulsion).

**Bituminous Grout**

A mixture of bituminous material and fine sand that will flow into place without mechanical manipulation when heated.

**Blind Nailing**

The use of nails that are not exposed to the weather in the finished roofing.

**Blister**

(1) A raised portion of a roofing membrane resulting from local internal pressure; (2) The similarly formed protuberances in coated prepared roofing.

**Blocking**

Wood built into a roofing system above the deck and below the membrane and flashing to a) stiffen the deck around an opening, b) act as a stop for insulation, c) serve as a nailer for attachment of the membrane or flashing.

**Bond**

The adhesive and cohesive forces holding two roofing components in intimate contact.

**Bottom Plate (Sole Plate)**

The lowest horizontal member of a wall that rests on the rough floor, to which the studding is nailed.

**Brick mold trim/Brick molding**

The wood molding covering the gap between brick masonry and a door or window frame.

**Building Paper**

A heavy, asphalt-impregnated paper used as a lining and/or vapor barrier between sheathing and an outside wall covering.

**Bundle**

A package of shingles. There are 3, 4 or 5 bundles per square.

**Butt Edge**

The lower edge of the shingle tabs.

**CA-B (Copper Azole)**

A new pressure-treated wood preservative.

**Cant Strip**

A beveled strip used under flashings to modify the angle at the point where the roofing or waterproofing membrane meets any vertical element.

**Cap Sheet**

A granule-surfaced, coated felt used as the top ply of a built-up roofing membrane.

**Capillary action/Capillarity**

The rising of water above the horizontal plane of the water table.

**Cationic Emulsion**

An emulsion in which the emulsifying system establishes a predominance of positive charges on the discontinuous phase.

**Caulk**

To fill a joint with mastic or asphalt cement to prevent leaks.

**Caulking**

A composition of vehicle and pigment, used at ambient temperatures for filling joints, that remains plastic for an extended time after application.

**Cavity**

The empty space between studs or joists to place insulation batts.

**CCA (Chromated Copper Arsenate)**

A historical and widely used pressure-treated wood preservative in residential construction prior to 01/01/2004.

**Cement**

An asphalt-based cement used to bond roofing materials. Also known as flashing cement or mastic; should conform to ASTM D-4586. Same as Asphalt - Flashing Cement.

**Chalk Line**

A line made on the roof by snapping a taut string or cord dusted with chalk. Used for alignment purposes.

**Class "A"**

The highest fire-resistance rating for roofing as per ASTM E-108. Indicates roofing is able to withstand severe exposure to fire originating from sources outside the building.

**Class "B"**

Fire-resistance rating that indicates roofing materials are able to withstand moderate exposure to fire originating from sources outside the building.

**Class "C"**

ASTM fire-resistance rating that indicates roofing material is able to withstand light exposure to fire originating from sources outside the building.

**Closed Cut Valley**

A method of valley treatment in which shingles from one side of the valley extend across the valley while shingles from the other side are trimmed 2 inches from the valley centerline. The valley flashing is not exposed.

**Coating**

A layer of viscous asphalt applied to the base material into which granules or other surfacing is embedded.

**Cold Applied**

Capable of being applied without heating as contrasted with hot-applied.

**Cold Joint**

A plane of weakness in concrete caused by an interruption or delay in the pouring operation, permitting the first batch to start setting before the next batch is added, with the result that the two batches have little or no bond.

**Collar**

Pre-formed flange placed over a vent pipe to seal the roof around the vent pipe opening. Also called a vent sleeve.

**Collar Beam**

A horizontal tie beam in a roof truss that connects two opposite rafters at a level considerably above the wall plate.

**Compatibility**

The ability of two or more substances to exist in harmony when mixed together or when brought into intimate contact without any adverse physical or chemical reaction.

**Condensation**

The change of water from vapor to liquid when warm, moisture-laden air comes in contact with a cold surface.

**Construction Joint**

A butted joint formed in a structural slab, so that one pour can be ended and another started at a later time.

**Coping**

A covering on top of a wall exposed to the weather, usually sloped to carry off water.

**Corrosion**

The major type of deterioration of metals. Often called oxidation, it is a chemical reaction of pure metal with oxygen or other elements.

**Counterflashing**

That portion of the flashing attached to a vertical surface to prevent water from migrating behind the base flashing.

**Coverage**

Amount of weather protection provided by the roofing material. Depends on number of layers of material between the exposed surface of the roofing and the deck, i.e., single coverage, double coverage, etc.

**Crawlspace Vent**

An opening to allow the passage of air through the unexcavated area under a first floor. Ideally there should be at least two vents per crawlspace.

**Creep**

The time-dependent part of a strain resulting from stress.

**Cricket**

A peaked saddle construction at the back of a chimney to prevent accumulation of snow and ice and to deflect water around the chimney.

**Cross Bracing**

A system of bracing by the use of ties. Typically used between floor joists to prevent them from twisting.

**Cure**

A process whereby a waterproof material attains its final performance properties. This process can occur through evaporation or heat or chemical reactions.

**Curing Time**

The period between application and the time when the material reaches its design physical properties.

**Cutback**

Solvent-thinned bitumen used in coldprocess roofing adhesives, flashing cements, and roof coatings.

**Cutoff**

A detail designed to prevent lateral water movement into the insulation where the membrane terminates at the end of a day's work. Also used to isolate sections of the roofing system. It is usually removed before the continuation of the work.

**Cutout**

The open portions of a strip shingle between the tabs.

**Dampproofing**

Treatment of a surface or structure to resist the passage of water in the absence of hydrostatic pressure.

**Dead Level**

Absolutely horizontal, or zero slope.

**Dead Level Roofing**

A roofing system applied on a surface with a 0 to 2% incline.

**Deck**

The surface, installed over the supporting framing members, to which the roofing is applied.

**Delamination**

Separation of envelope materials from the applied substrate due to movement or improperly applied materials.

**Direction Change**

A change in the orientation of the principal dimension or of the support of adjoining units of the roofing system.

**Door / window flange**

A rib or rim on an object for strength, for guiding, or for attachment to another object.

**Door/window jamb**

The vertical member on each side of a door/window frame.

**Dormer**

A framed window unit projecting through the sloping plane of a roof.

**Downspout**

A pipe for draining water from roof gutters. Also called a leader.

**Drain Pan**

Receptacle comprising a shallow container intended to catch and collect liquid from (1) a device containing liquid which is expected to be removed from the device or leak from the device, or (2) a wet article placed within the container.

**Drainage Plane**

The area within a wall or roof that is designed to carry water away from structure.

**Drip Edge**

A non-corrosive, non-staining material used along the eaves and rakes to allow water run-off to drip clear of underlying construction.

**Eave Vents**

Vent openings located in the soffit under the eaves of a house to allow the passage of air through the attic and out the roof vents.

**Eaves**

The horizontal, lower edge of a sloped roof.

**Edge Curl**

An upward-curved sidelap or endlap.

**Edge Venting**

The practice of providing regularly spaced protected openings at a roof perimeter to relieve water vapor pressure in the insulation.

**Elasticity**

The measure of a sealant's ability to return to its original shape and size after being compressed or elongated. As with elongation, elasticity is measured as a percentage of its original length.

**Envelope**

A continuous membrane edge seal formed at the perimeter and at penetrations by folding the base sheet or ply over the plies above and securing it to the top of the membrane. The envelope prevents bitumen seepage from the edge of the membrane.

**Equilibrium moisture content**

(1) the moisture content of a material stabilized at a given temperature and relative humidity, expressed as percent moisture by weight; (2) the typical moisture content of a material in any given geographical area.

**Expansion Joint**

A joint designed to accommodate movement in the structure or components of the system due to thermal or stress-load variation.

**Exposure**

That portion of the roofing exposed to the weather after installation.

**Exposure 1 Grade Plywood**

Type of plywood approved by the American Plywood Association for exterior use.

**Faced Insulation**

Insulation with an attached vapor retarder (kraft paper or foil-backed paper).

**Facia (Fascia)**

(1) The board connecting the top of the siding with the bottom of a soffit; (2) A board nailed across the ends of the rafters at the eaves.

**Factory Square**

10 m<sup>2</sup> (108 ft<sup>2</sup>).

**Fallback**

A reduction in bitumen softening point, sometimes caused by refluxing or overheating in a relatively closed container. See also Softening point drift.

**Feathering Strips**

Tapered wood filler strips placed along the butts of old wood shingles to create a level surface when reroofing over existing wood shingle roofs. Also called horsefeathers.

**Felt**

Fibrous material saturated with asphalt and used as an underlayment of sheathing paper.

**Fiber Glass Insulation**

An energy-efficient glass fiber product for heat and noise insulation.

**Fiber Glass Mat**

An asphalt roofing base material manufactured from glass fibers.

**Fine Mineral Surfacing**

Water-insoluble inorganic material, more than 50% of which passes the 500 µm (No. 35) sieve, used on the surface of roofing.

**Finger Blisters**

Finger-shaped blisters or wrinkles in the plies of a built-up roofing or waterproofing membrane.

**Fishmouth**

(1) A half-cylindrical or half-conical opening formed by an edge wrinkle of the membrane; (2) In shingles, a half conical opening formed at a cut edge.

**Flashing**

Pieces of metal or roll roofing used to prevent seepage of water into a building around any intersection or projection in a roof, such as vent pipes, chimneys, adjoining walls, dormers and valleys. Galvanized metal flashing should be minimum 26-gauge.

**Flashing Cement**

An asphalt-based cement used to bond roofing materials. Also known as mastic; should conform to ASTM D-4586. Same as Asphalt - Cement.

**Flat Ceiling**

A ceiling with no change in elevation.

**Foil-Faced Vapor Retarder**

Created by coating a foil-backed paper with a thin layer of asphalt adhesive. The coated side of the foil-backed paper is then applied to the unfaced insulation material. The asphalt adhesive bonds the foil-backed paper and the insulation together.

**Fungus**

A type of roof discoloration caused by algae. Commonly called fungus growth. Also called algae discoloration.

**Furring Strips**

Flat pieces of lumber used to build up an irregular framing to an even surface, either the leveling of a part of a wall or ceiling.

**Gable**

The upper portion of a sidewall that comes to a triangular point at the ridge of a sloping roof.

**Gable End Walls**

The triangular end of an exterior wall above the eaves.

**Gable Roof**

A type of roof containing sloping planes of the same pitch on each side of the ridge. Contains a gable at each end.

**Gable Vents**

A louver mounted in the top of the gable to allow the passage of air through the attic.

**Gambrel Roof**

A type of roof containing two sloping planes of different pitch on each side of the ridge. The lower plane has a steeper slope than the upper. Contains a gable at each end.

**Glass Felt**

Glass fibers bonded into a sheet with resin and suitable for impregnation in the manufacture of bituminous waterproofing, roofing membranes and shingles.

**Glass Fibers**

Glass in a strand form. The ingredients are essentially the same as those found in any glass product, such as a window pane or drinking glass.

**Glass Mat**

A thin mat of glass fibers with or without a binder.

**Grace Ice & Water Shield**

The leading self-adhered membrane roofing underlayment offers premium leak protection for sloped roofs subject to the effects of ice dams or wind driven rain. The membrane is designed to be applied to the roof deck prior to the application of the finished roof coverings (shingles, tile, metal).

**Granules**

Ceramic-coated, colored crushed rock that is applied to the exposed surface of asphalt roofing products.

**Gutter**

The trough that channels water from the eaves to the downspouts.

**Head Flashing**

Flashing installed above the window head detail just below adjacent facing material that the window abuts.

**Head Lap**

Shortest distance from the butt edge of an overlapping shingle to the upper edge of a shingle in the second course below. The triple coverage portion of the top lap of strip shingles.

**Hip**

The inclined external angle formed by the intersection of two sloping roof planes. Runs from the ridge to the eaves.

**Hip Roof**

A type of roof containing sloping planes of the same pitch on each of four sides. Contains no gables.

**Hip Shingles**

Shingles used to cover the inclined external angle formed by the intersection of two sloping roof planes.

**Holiday**

An area where a liquid-applied material is missing.

**Horsefeathers**

Tapered wood filler strips placed along the butts of old wood shingles to create a level surface when reroofing over existing wood shingle roofs. Also called feathering strips.

**Hot stuff or "hot"**

A roofer's term for hot bitumen.

**Hydrostatic pressure**

Pressure applied to envelope materials by various heights of water at rest.

**Ice Dam**

Condition formed at the lower roof edge by the thawing and re-freezing of melted snow on the overhang. Can force water up and under shingles, causing leaks.

**Incline**

The slope of a roof expressed in percent or in the number of vertical units of rise per horizontal unit of run.

**Inset Staple**

Stapling to the inside portion of the stud or rafter.

**Insulate**

To prevent the passage of heat, sound or electricity into or out of.

**Insulated Ceiling (IC)**

Marking on recessed lighting fixture indicating that it is designed for direct insulation contact.

**Insulation**

Material used in insulating.

**Insulation Density**

Denser products have more fibers per square inch, providing greater insulating power through higher R-values.

**Interlocking Shingles**

Individual shingles that mechanically fasten to each other to provide wind resistance.

**Joist**

Parallel beam set from wall to wall to support the floor or ceiling.

**Joist Hanger**

A metal angle or strap used to support and fix the ends of wood joists or rafters to beams or girders.

**Kick Out Flashing / Rain Diverter Flashing**

The section of flashing (usually located at lowest point of roof) that directs water away from wall.

**Knee Walls**

Walls of varying length. Used to provide additional support to roof rafters with a wide span.

**Kraft-Faced Vapor Retarder**

Created by coating kraft paper with a thin layer of asphalt adhesive. The coated side of the kraft paper is then applied to the unfaced insulation material. The asphalt adhesive bonds the kraft paper and the insulation together.

**Laminated Shingles**

Strip shingles containing more than one layer of tabs to create extra thickness. Also called three-dimensional shingles or architectural shingles.

**Lap**

To cover the surface of one shingle or roll with another.

**Lath**

Strips of metal or wood used as a base for plaster or stucco.

**Leader** See Downspout.

**Ledger board**

(1) One of multiple boards attached horizontally across a series of vertical supports, as in the construction of a fence. (2) A ribbon strip.

**Lot**

In roofing: (1) Production lot - all material produced in one eight-hour shift of the same type (and color when applicable); (2) Delivery lot - all material of the same type delivered at one time by one truck or railroad car.

**Low Slope Application**

Method of installing asphalt shingles on roof slopes between 2 and 4 inches per foot.

**Mansard Roof**

A type of roof containing two sloping planes of different pitch on each of four sides. The lower plane has a much steeper pitch than the upper, often approaching vertical. Contains no gables.

**Masonry**

Brick, stone, concrete, etc., or masonry combinations thereof, bonded with mortar.

**Mastic**

An asphalt-based cement used to bond roofing materials. Also known as flashing cement; should conform to ASTM D-4586.

**Membrane**

A flexible or semiflexible roof covering or waterproofing, whose primary function is the exclusion of water.

**Metal Flashing**

Frequently used as through-wall, cap- or counter flashing. See Flashing.

**Metal Flue**

A metal channel through which hot air, gas, steam or smoke may pass.

**Metal Insulation Supports**

Sixteen- or 24-inch wire rods or crisscrossed wire to hold floor insulation in place.

**Mildew (Mold)**

Surface mold, often a green-black loose powdery mass. May occur on both interior and exterior surfaces and is evidence of improper ventilation or condensation.

**Mineral Spirits**

A refined petroleum distillate have a low aromatic hydrocarbon content, with volatility, flash point, and other properties making it suitable as a thinner and solvent in paints, varnishes, and similar products.

**Mole Run**

A meandering ridge in a membrane not associated with insulation or deck joints.

**Nailing**

(1) exposed-nailing of roofing wherein nail heads are bare to the weather; (2) concealed from the weather. See also Blind nailing.

**Negative side waterproofing**

An application wherein the waterproofing system and the source of hydrostatic pressure are on opposite sides of the structural element.

**Neoprene**

A synthetic rubber (polychloroprene) used in liquid- or sheet-applied elastomeric roofing membranes or flashing.

**Nesting**

A method of reroofing with new asphalt shingles over old shingles in which the top edge of the new shingle is butted against the bottom edge of the existing shingle tab.

**No Cut-Out Shingles**

Shingles consisting of a single solid tab with no cutouts.

**Noncombustible**

The material will not burn.

**Normal Slope Application**

Method of installing asphalt shingles on roof slopes between 4 inches and 21 inches per foot.

**NRCA**

National Roofing Contractors Association

**One-on-One**

The application of a single ply of roofing over the substrate, followed by the application of a second single ply over the first (phased application).

**Open Valley**

Method of valley construction in which shingles on both sides of the valley are trimmed along a chalk line snapped on each side of the valley. **Shingles do not extend across the valley. Valley flashing is exposed.**

**Organic**

Composed of hydrocarbons or their derivatives, or of plant or animal matter.

**Organic Felt**

An asphalt roofing base material manufactured from cellulose fibers.

**Oriented Strand Board (OSB)**

A structural panel made of wood strands sliced in the long direction and bonded together with a binder under heat and pressure.

**Overhang**

That portion of the roof structure that extends beyond the exterior walls of a building.

**Overlay Shingle**

A one-piece base shingle to which overlay pads, consisting of an additional layer of asphalt and granules, are applied in random patterns to simulate two-piece laminated shingles.

**Parapet**

A wall or top portion of a wall extending above an attached horizontal surface such as a roof, terrace or deck. Often used to separate combustible adjoining room areas or to provide a safety barrier at a roof edge.

**Parapet Flashing**

Flashing installed at the base of a parapet, usually at ceiling level. It is also used on the roof side of parapets as part of roof or counter flashing.

**Parge**

In masonry construction, a coat of cement mortar on the face of rough masonry.

**Permeability**

The ability of a waterproofing material or substrate to allow the passage of water vapor through itself without blistering.

**Permeance**

The rate of water vapor transmission per unit area at a steady state through a membrane or assembly, expressed in ng/Pa s m<sup>2</sup> (grain/ft<sup>2</sup> h in. Hg).

**Phased Application**

The installation of a roofing or waterproofing system during two or more separate time intervals; a roofing system not installed in a continuous operation.

**Pinhole**

A tiny hole in a film, foil or laminate comparable in size to one made by a pin.

**Pitch**

The degree of roof incline expressed as the ratio of the rise, in feet, to the span, in feet.

**Ply**

A layer in a built-up roofing membrane.

**Polyethylene Vapor Barrier**

Plastic film used to prevent moisture from passing through unfaced insulation. Both 4- and 6-mil polyethylene are preferred because they are less likely to be damaged during construction.

**Pond**

A surface that is incompletely drained.

**Positive Side Waterproofing**

An application wherein the waterproofing system and the source of hydrostatic pressure are on the same side of the structural element.

**Pot Life**

The length of time a waterproof material or system is workable or applicable after having been activated.

**Primer**

A thin liquid bitumen applied to a surface to improve the adhesion of heavier applications of bitumen and to absorb dust.

**Rafter**

The supporting framing member immediately beneath the deck, sloping from the ridge to the wall plate.

**Rafters**

A sloping, parallel beam that supports a pitched roof.

**Rake**

The inclined edge of a sloped roof over a wall.

**Random-Tab Shingles**

Shingles on which tabs vary in size and exposure.

**Recovering**

The process of covering an existing roofing system with a new roofing system.

**Reentrant Corner**

An inside corner of a surface, producing stress concentrations in the roofing or waterproofing membrane.

**Reglet**

A groove in a wall or other surface adjoining a roof surface for the attachment of counterflashing.

**Reinforced Joint**

A concrete joint bridged by reinforcing steel embedded in both joining parts.

**Relative Humidity**

The ratio of the mass per unit volume (or partial pressure) of water vapor in an air-vapor mixture to the saturated mass per unit volume (or partial pressure) of the water vapor at the same temperature, expressed as a percentage.

**Release Tape**

A plastic or paper strip that is applied to the back of self-sealing shingles. This strip prevents the shingles from sticking together in the bundles, and need not be removed for application.

**Reroofing**

The process of recovering or replacing an existing roofing system. See also Recovering.

**Resilient Channels**

Metal channels used to further inhibit sound transmission through wall and ceiling framing.

**Ridge**

The uppermost horizontal external angle formed by the intersection of two sloping roof planes.

**Ridge Shingles**

Shingles used to cover the horizontal external angle formed by the intersection of two sloping roof planes.

**Ridge Vent**

A vent mounted along the entire ridge line of the roof to allow the passage of air through the attic or cathedral ceiling.

**Ridging**

An upward, tenting displacement of a membrane, frequently over an insulation joint.

**RIPCORD®**

A patented Grace technology that provides split of the release paper in half. It enables proper integration of the flashing with the other key moisture protection elements of the wall.

**Rim Joist**

Perimeter joist for wood floor framing system. Usually referred to in conjunction with composite wood floor joists.

**Rise**

The vertical distance from the eaves line to the ridge.

**Roll Roofing**

Asphalt roofing products manufactured in roll form.

**Roof**

The outer cover and its supporting structures on the top of a building.

**Roof Cement** See Flashing Cement.

**Roof Vent**

A louver or small dome mounted near the ridge of the roof to allow the passage of air through the attic.

**Roofing System**

An assembly of interacting components designed to weatherproof, and normally to insulate, a building's top surface.

**Rubber**

A material that is capable of recovering from large deformations quickly and forcibly. It can be, or already is, modified to a state in which it is essentially insoluble (but can still swell) in boiling solvents such as benzene or methyl ethyl ketone.

**Run**

The horizontal distance from the eaves to a point directly under the ridge. One half the span.

**R-Value**

The measure of heat transfer. The higher the R-value, the better the insulation material's ability to resist the flow of heat through it.

**Saddle**

In roofing, a small structure that helps to channel surface water to drains. Frequently located in a valley, a saddle is often constructed like a small hip roof, or like a pyramid with a diamond-shaped base. See also Cricket.

**Sales Square**

The quantity of prepared roofing required to cover 9.3m<sup>2</sup> (100 ft<sup>2</sup>) of deck.

**Saturated Felt**

An asphalt-impregnated felt used as an underlayment between the deck and the roofing material.

**Scuttle**

A hatch that provides access to the roof from the interior of the building.

**Sealant**

A mixture of polymers, fillers, and pigments used to fill and seal joints where moderate movement is expected; unlike caulking, it cures to a resilient solid.

**Self-Sealing Shingles**

Shingles containing factory-applied strips or spots of self-sealing adhesive.

**Selvage**

An edge or edging that differs from the main part of a fabric or a granule-surfaced roll roofing.

**Shading**

Slight differences in shingle color that may occur as a result of normal manufacturing operations.

**Shark Fin**

An upward-curved felt sidelap or endlap.

**Sheathing**

Exterior grade boards used as a roof deck material.

**Shed Roof**

A roof containing only one sloping plane. Has no hips, ridges, valleys or gables.

**Shelf Life**

The maximum time packaged and unopened waterproofing materials can remain usable.

**Shingle**

(1) A small unit of prepared roofing designed for installation with similar units in overlapping rows on inclines normally exceeding 25%; (2) To apply any sheet material in overlapping rows like shingles.

**Sill**

The horizontal member of the bottom of a window or exterior door frame.

**Skater's Cracks**

Curvilinear cracks in a roofing membrane that appear to relate neither to the direction of application of the membrane components nor the substrate components.

**Slippage**

Relative lateral movement of adjacent components of a built-up membrane. It occurs mainly in roofing membranes on a slope, sometimes exposing the lower plies or even the base sheet to the weather.

**Slope**

The degree of roof incline expressed as the ratio of the rise, in inches, to the run, in feet.

**Smooth-surfaced Roof**

A built-up roof without mineral aggregate surfacing.

**Soffit**

The finished underside of the eaves.

**Softening Point**

The temperature at which a bitumen becomes soft enough to flow as determined by an arbitrary, closely defined method.

**Softening Point Drift**

A change in the softening point during storage or application. See also Fallback.

**Soil Stack**

A vent pipe that penetrates the roof.

**Solvent**

Liquid, usually volatile, which is used in the manufacture of water repellents and paints to dissolve or disperse the constituents (i.e., resins, solids) and which evaporate during drying.

**Split**

A membrane tear resulting from tensile stress.

**Spud**

To remove the roofing aggregate and most of the bituminous top coating by scraping and chipping.

**Square**

A unit of roof measure covering 100 square feet.

**Stapling Flange**

A protruding edge on faced insulation used to staple the insulation to the framing.

**Starter Strip**

Asphalt roofing applied at the eaves that provides protection by filling in the spaces under the cutouts and joints of the first course of shingles.

**Steep Slope Application**

Method of installing asphalt shingles on roof slopes greater than 21 inches per foot.

**Step Flashing**

Flashing application method used where a vertical surface meets a sloping roof plane.

**Step Flashing**

(1) The technique of sealing a joint between metal and built-up membrane with one or two plies of felt or fabric and hot- or cold-applied bitumen; (2) The technique of taping joints between insulation boards or deck panels.

**Strip Shingles**

Asphalt shingles that are approximately three times as long as they are wide.

**Stringers**

A horizontal timber used to support joists or other cross members.

**Stripping**

Strip flashing: (1) the technique of sealing a joint between metal and built-up membrane with one or two plies of felt or fabric and hot- or cold-applied bitumen; (2) the technique of taping joints between insulation boards or deck panels.

**Structural**

A term applied to those members in a structure that carry an imposed load in addition to their own weight.

**Stucco**

A cement plaster used to cover exterior wall surfaces; usually applied over a wood or metal lath base.

**Stud**

An upright post in the framework of a wall for supporting an approved interior material such as gypsum wallboard.

**Sub Facia**

An unexposed board nailed across the ends of the rafters at the eaves to which the facia is nailed as the finished exposure.

**Subfloor**

The structural material that spans across floor joists. It serves as a working platform during construction and provides a base for the finish floor.

**Substrate**

Structure or envelope components to which waterproofing materials or systems are applied.

**Tackiness**

Stickiness of a waterproofing material's exposed surface after installation or during its final curing stage.

**Thermal Insulation**

A material applied to reduce the flow of heat.

**Thermal Movement**

Movement, either expansion or contraction, caused by temperature changes.

**Tie-off**

In waterproofing, the transitional seal used to terminate a waterproofing application at the top or bottom of flashing or by forming a water-tight seal with the substrate, membrane, or waterproofing system(s).

**T-joint**

The condition created by the overlapping intersection of three or four sheets in the membrane.

**Top Plate**

The horizontal member nailed to the top of the studding of a wall.

**Traffic Surface**

A surface exposed to traffic, either pedestrian or vehicular, also described as finish wearing surface.

**UL**

Underwriters Laboratories, Inc.

**UL Label**

Label displayed on packaging to indicate the level of fire and/or wind resistance of asphalt roofing.

**Underlayment**

A roofing underlayment is a self-adhered rubberized membrane that goes under shingles to prevent water penetration. It is the one piece of a roofing system that is expressly designed to be waterproof.

Unfaced Insulation

Insulation with no attached vapor barrier.

**Valley**

The internal angle formed by the intersection of two sloping roof planes.

**Vapor Barrier**

Any material used to prevent the passage of water vapor.

**Vapor Migration**

The movement of water vapor from a region of high vapor pressure to a region of lower vapor pressure.

**Vapor Retarder**

A layer of material or a laminate used to appreciably reduce the flow of water vapor into the roofing system.

**Vent**

Any outlet for air that protrudes through the roof deck, such as a pipe or stack. Any device installed on the roof, gable or soffit for the purpose of ventilating the underside of the roof deck.

**Vent Sleeve**

Pre-formed flange placed over a vent pipe to seal the roof around the vent pipe opening. Also called a collar.

**Ventilation**

Creates a positive flow of air that allows the house to "breathe" and helps prevent moisture build-up year-round.

**Vinyl Siding Institute**

Is the trade association for manufacturers of vinyl siding and suppliers of raw materials, equipment or services to the vinyl industry. See <http://www.vinylsiding.org>

**Water Repellent System**

An exterior coating system for above grade concrete or masonry that temporarily repels water but is not intended to prevent the passage of moisture under hydrostatic pressure.

**Waterproofing**

Prevention of moisture flow due to water pressure.

**Wax**

Any of various unctuous, viscous or solid heat-sensitive substances, consisting essentially of high molecular weight hydrocarbons or esters of fatty acids, characteristically insoluble in water but soluble in most organic solvents.

**Weather Resistive Barrier (WRB)**

The surface or surfaces of a wall system responsible for preventing water infiltration to the building interior. Materials commonly referred to as WRB are felt, building paper, and housewrap.

**Woven Valley**

Method of valley construction in which shingles from both sides of the valley extend across the valley and are woven together by overlapping alternate courses as they are applied. The valley flashing is not exposed.