DOOR

This instruction is used to specify the size, position, and number of doors and their heat-transfer characteristics. Each DOOR instruction applies to the EXTERIOR–WALL instruction preceding it and describes a door on that exterior wall. *Note: Glass doors should be treated as windows rather than doors.*

u-name	may be specified.
LIKE	may be used to copy data from a previously entered and u-named DOOR instruction.
HEIGHT	is the height of the door. This keyword is mandatory. The range is from 0.0+ to 40 feet.
WIDTH	is the width of the door. This keyword is mandatory. The range is from 0.0+ to 1000 feet.
CONSTRUCTION	identifies the u-name of a previously defined CONSTRUCTION instruction that describes the effective U-Value of this door. This keyword is mandatory.
SETBACK	is the distance that the door is recessed into the wall, measured parallel to the Z axis of the surface coordinate system. The range is from 0.0+ to 10 feet, and defaults to 0.0, that is, no setback.

Note: Overhangs and fins can be applied the same as for WINDOW command.

Example for a solid wood door:

```
D1     = CONSTRUCTION
           U-VALUE = .5   ..

DOOR1  = DOOR
           HEIGHT       = 7
           WEIGHT       = 3
           CONSTRUCTION = D1   ..
```

INTERIOR–WALL

The INTERIOR–WALL instruction is used to specify the size, construction, and adjacent space for an interior wall, ceiling, or interior floor. The INTERIOR–WALL will be considered as a heat transfer surface by the LOADS and SYSTEMS programs. Each INTERIOR–WALL instruction applies to the SPACE instruction preceding it and describes one of the interior walls, ceilings, or interior floors of that space.

u-name	may be specified.
LIKE	may be used to copy data from a previously u-named INTERIOR–WALL instruction.
AREA	is the surface area of the interior wall, ceiling, or interior floor. The range is from 0.0+ to 100000.0 ft^2, and there is no default.
NEXT–TO	is the u-name of the space that shares this interior wall, ceiling, or interior floor as a boundary with the space under consideration. This keyword is required if INT–WALL–TYPE = STANDARD or AIR; otherwise, it is unused.
CONSTRUCTION	is used to identify, by u-name, the previously entered CONSTRUCTION instruction that defines the type of construction used in this wall. This is a mandatory entry.

Example for a case where there is an adjacent space:

```
P1          = CONSTRUCTION
              U-VALUE = .2    ..

PARTITION = INTERIOR-WALL
              AREA         = 320
              CONSTRUCTION = P1
              NEXT-TO      = SPACE-2    ..
```

UNDERGROUND–WALL or UNDERGROUND–FLOOR

This instruction is used to specify the size and construction of an underground wall, underground floor, or a floor on the ground (slab-on-grade). Each UNDERGROUND–WALL or UNDERGROUND–FLOOR instruction applies to the SPACE instruction preceding it and describes one of the underground walls or underground floors of that SPACE.

Specifying the U-Value and the area of a floor in contact with the soil calls for some engineering judgment. Using the total area of the floor will drastically overestimate the heat loss through the floor, because the floor will tend to raise the temperature of the surrounding soil. Therefore, you should specify an effective (lower) area. For slab-on-grade, the effective area is that of a one-foot-wide band around the perimeter of the surface. For below-grade walls, the effective area is that of a one-foot-high band at the top of the wall.

u-name	may be specified.
LIKE	is analogous to LIKE for INTERIOR–WALL.
AREA	is the effective area of the UNDERGROUND–WALL or UNDERGROUND–FLOOR. The range is from 0.0+ to 100000.0 ft^2, and there is no default.
CONSTRUCTION	is the u-name of a previously defined CONSTRUCTION instruction that describes the LAYERS (response factors) *or* the effective U-Value of this UNDERGROUND–WALL or UNDERGROUND–FLOOR. This keyword is required if UNDERGROUND–WALL (or –FLOOR) is specified.

Rules:

1. The associated SPACE instruction must precede an UNDERGROUND–WALL or UNDERGROUND–FLOOR instruction.

2. Before an UNDERGROUND–WALL or UNDERGROUND–FLOOR instruction is specified, you must specify a CONSTRUCTION instruction having a U-VALUE or LAYERS keyword.

Example:

```
BOTTOM-1 = UNDERGROUND-FLOOR
           AREA         = 5000
           CONSTRUCTION = FLOOR-1   ..
```

LOADS–REPORT

This instruction defines which LOADS reports will be output. Users can select from *verification* reports and *summary* reports. Verification reports echo your input; summary reports show calculation results, usually monthly and annually.

Format:

```
LOADS–REPORT    VERIFICATION = (code-word list)
                SUMMARY = (code-word list)  ..
```

Example:

```
LOADS–REPORT    VERIFICATION = (LV–D)
                SUMMARY = (LS–B, LS–D)  ..
```

will print verification report LV–D, "Details of Exterior Surfaces in the Project", and summary reports LS–B "Space Peak Load Components", and LS–D "Building Monthly Loads Summary". A description of the basic LOADS reports, with corresponding code-words is given in Appendix C.