not permeate through frames and into the room. Classes are defined by water tightness at the different pressure levels.

Class and application relationships are set out in Table 29. Classes available for door sets are from 10 to 25, for doors from 10 to 35, and for windows from 10 to 50.

Table 29 Classes for Water Tightness

<u>Class</u>	Application
10	Houses in city areas
15	Houses and apartments in city areas
25	Highrise apartments and buildings in windy areas

Source: Japanese Standards Institute; K. F. International, Inc.

Noise reduction is tested and measured to define classes and each class must comply with a noise reduction curve. Class 25 reduces noise by 25dB. Classes defined in JIS are 25, 30, 35 and 40. This is for doors and windows only.

Thermal insulation is expressed in m^2 .h. C/kcal. The classes for doors and windows are defined in Table 30. Classes available for doors and windows are from 0.25 to 0.40; for PVC interior windows in double window systems the classes are from 0.33 to 0.50.

Table 30Thermal Insulation Classes

Class	m ² .h.C/kcal	Application
0.25	0.25 and more	
0.29	0.29 and more	Northern Honshu
0.33	0.33 and more	Hokkaido
0.40	0.40 and more	Hokkaido
0.50	0.50 and more	for PVC interior windows

Source: Japanese Standards Institute, K. F. International, Inc.