



Rocks

Gneiss

Type:

Metamorphic; regional.

Texture/Appearance:

Foliated, often with distinct banding (segregation) of minerals; some preferred orientation in micas (platy) or hornblende (prismatic crystals). Medium to coarse-grained granular minerals more common than platy. Schistosity poorly developed; fractures into coarse pieces and with difficulty into small cubes or thick slabs.

Color:

Usually light with light and dark bands depending on mineral constituents.

Mineralogy/Chemistry:

Felsic, variable with source rock. Typically contains feldspars, quartz and mafic minerals. Specific name depends on mineralogy of major accessories, e.g. Biotite gneiss, sillimanite gneiss, etc.

Occurrence/Use:

Most gneisses form from sedimentary rocks of various types during regional metamorphism (medium to high grade). Others may form from the metamorphism of granitic, granodioritic and tonalitic rocks. Commonly distributed throughout the world's metamorphic belts including the Alps, the Canadian Shield, the northwestern Adirondacks of New York and the rocks of New England. Used as a local building material and for road aggregate.