

TYPE OF METAMORPHISM

CONTACT---occurs typically around intrusive igneous rocks (batholiths, dikes, sills, etc.) and below extrusive igneous rocks (lava flows). Heat and chemically active fluids are the more important agents of metamorphism while pressure plays a subordinate role. Water vapor is the most abundant volatile constituent associated with magmatic activity.

REGIONAL---covers large areas of continental crust typically associated with mountain ranges, particularly those associated with convergent tectonic plates or the roots of previously eroded mountains. Heat and pressure are the more important agents of metamorphism while chemically active fluids play a subordinate role. The collision of two continental plates or the collision of island arcs with a continental plate produces the extreme compressional forces required for metamorphic changes.