

TABLE 19-1 Generalized guide to characteristic minerals for principal rock compositional types in the various metamorphic facies^a

Facies	Mafic rocks	Ultramafic rocks	Mudrocks	Calcareous rocks
Zeolite	Analcime, Ca-zeolites, prehnite, zoisite, albite	Serpentine, brucite, chlorite, dolomite, magnesite	Quartz, clays, illite, albite, chlorite	Calcite, dolomite, quartz, talc, clays
Prehnite-pumpellyite	Chlorite, prehnite, albite, pumpellyite, epidote	Serpentine, talc, forsterite, tremolite, chlorite	Quartz, illite, muscovite, albite, chlorite (stilpnomelane)	Calcite, dolomite, quartz, clays, talc, muscovite
Greenschist	Chlorite, actinolite, epidote or zoisite, albite	Serpentine, talc, tremolite, brucite, diopside, chlorite, (magnetite)	Quartz, plagioclase, chlorite, muscovite, biotite, garnet, pyrophyllite, (graphite)	Calcite, dolomite, quartz, muscovite, biotite
Epidote-amphibolite	Hornblende, actinolite, epidote or zoisite, plagioclase, (sphene)	Forsterite, tremolite, talc, serpentine, chlorite, (magnetite)	Quartz, plagioclase, chlorite, muscovite, biotite, (graphite)	Calcite, dolomite, quartz, muscovite, biotite, tremolite
Amphibolite	Hornblende, plagioclase, (sphene), (ilmenite)	Forsterite, tremolite, talc, anthophyllite, chlorite, orthopyroxene, (magnetite)	Quartz, plagioclase, chlorite, muscovite, biotite, garnet, staurolite, kyanite, sillimanite, (graphite), (ilmenite)	Calcite, dolomite, quartz, biotite, tremolite, forsterite, diopside, plagioclase
Granulite	Hornblende, augite, orthopyroxene, plagioclase, (ilmenite)	Forsterite, orthopyroxene, augite, hornblende, garnet, Al-spinel	Quartz, plagioclase, orthoclase, biotite, garnet, cordierite, sillimanite, orthopyroxene	Calcite, quartz, forsterite, diopside, wollastonite, humite-chondroditite, Ca-garnet, plagioclase
Blueschist	Glaucophane, lawsonite, albite, aragonite, chlorite, zoisite	Forsterite, serpentine, diopside	Quartz, plagioclase, muscovite, carpholite, talc, kyanite, chloritoid	Calcite, aragonite, quartz, forsterite, diopside, tremolite
Eclogite	Mg-rich garnet, omphacite, kyanite, (rutile)	Forsterite, orthopyroxene, augite, garnet	Quartz, albite, phengite, talc, kyanite, garnet	Calcite, aragonite, quartz, forsterite, diopside
Albite-epidote hornfels	Albite, epidote or zoisite, actinolite, chlorite	Serpentine, talc, tremolite, chlorite	Quartz, plagioclase, muscovite, chlorite, cordierite	Calcite, dolomite, quartz, tremolite, talc, forsterite
Hornblende hornfels	Hornblende, plagioclase, orthopyroxene, garnet	Forsterite, orthopyroxene, hornblende, chlorite, (Al-spinel), (magnetite)	Quartz, plagioclase, muscovite, biotite, cordierite, andalusite	Calcite, dolomite, quartz, tremolite, diopside, forsterite
Pyroxene hornfels	Orthopyroxene, augite, plagioclase, (garnet)	Forsterite, orthopyroxene, augite, plagioclase, Al-spinel	Quartz, plagioclase, orthoclase, andalusite, sillimanite, cordierite, orthopyroxene	Calcite, quartz, diopside, forsterite, wollastonite
Sanidinite	Orthopyroxene, augite, plagioclase, (garnet)	Forsterite, orthopyroxene, augite, plagioclase	Quartz, plagioclase, sillimanite, cordierite, orthopyroxene, sapphirine, Al-spinel	Calcite, quartz, diopside, forsterite, wollastonite, monticellite, akermanite

^aNote that these are not necessarily assemblages, but only the minerals likely to occur in each facies. Especially characteristic trace minerals are given in parentheses.

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