

## Raasberg-Formation / Raasberg Formation

(not shown in the ASC 2004)

BERNHARD HUBMANN

**Validity:** Valid; first description by FLÜGEL & MAURIN (1956: “gelbe Gesteinsserie”), resp. FLÜGEL (1961: “Raasberg-Folge”); formalized by FLÜGEL (2000: p. 41; Raasberg-Formation).

**Type area:** ÖK50-UTM, map sheet 4223 Weiz (ÖK50-BMN, map sheet 165 Weiz).

**Type section:** FLÜGEL (2000) selected a type region at Raasberg, east of ÖK50-UTM, map sheet 4223 Weiz (ÖK50-BMN, map sheet 165 Weiz) (N 47°15'01" / E 15°39'37").

**Reference section(s):** -

**Derivation of name:** After “Raasberg” (1,009 m), a mountain east of Weiz, approx. 48 km east of Graz.

**Synonyms:** Gelbe Gesteinsserie (FLÜGEL & MAURIN, 1956); “fragliche Triasserie” (FLÜGEL & MAURIN, 1957a); “triasverdächtige Gesteine” (FLÜGEL & MAURIN, 1957b); partly: Grenzzone (KUNTSCHNIG, 1927).

**Lithology:** Sericitic quartzites, yellow platy limestones and white to light grey dolostones.

**Fossils:** Unknown.

**Origin, facies:** Shallow marin ?

**Chronostratigraphic age:** Presumably Pragian–Eifelian.

**Biostratigraphy:** -

**Thickness:** Up to 500 m.

**Lithostratigraphically higher rank unit:** Peggau Group.

**Lithostratigraphic subdivision:** FLÜGEL & MAURIN (1957a) recognized four lithofacial types which were considered as members by FLÜGEL (2000), i.e., Egg Member, Häulerkreuz Member, Lammkogel Member and Stroß Member.

Egg Member: Light grey to white dolomites with local intercalations of quartzites and dolomitic limestones; at least 250 m in thickness reddish-purple to green volcanics within grey to bluish dolostones; about 50 m (up to 200 m) in thickness.

Häulerkreuz Member: Light blue to bluegrey, coarse grained limestones and dolomites, yellow sericitic quartzites and metatuffs; thickness unknown.

Lammkogel Member: Yellow to light grey quartzites and quartzitic slates; 100 to 200 m in thickness.

Stroß Member: White to light reddish dolomites and light grey limestones with cellular dolomites, subordinate greenstones; up to 200 m in thickness.

**Underlying unit(s):** Crystalline rocks tectonically underlying the Graz Paleozoic.

**Overlying unit(s):** Schöckel Formation.

**Lateral unit(s):** -

**Geographic distribution:** Styria, highland in the surroundings of Graz; ÖK50-BMN, map sheets 134 Passail, 162 Köflach, 163 Voitsberg, 164 Graz, 165 Weiz.

**Remarks:** CLAR (1933) compared the succession with Lower Devonian sequences of the Rannach Nappe, whereas FLÜGEL & MAURIN (1956, 1957a, b) and H. FLÜGEL (1961, 1975) supposed a possible Mesozoic (?Triassic) age.

**Complementary references:** -

## Schöckel-Formation / Schöckel Formation

BERNHARD HUBMANN

**Validity:** Valid; first description by CLAR (1874: Schöcklkalk); formalized by FLÜGEL (2000: p. 42; Schöckelkalk-Formation; change of name into Schöckel-Formation by EBNER et al. (2001).

**Type area:** ÖK50-UTM, map sheet 4229 Graz (ÖK50-BMN, map sheet 164 Graz).

**Type section:** No type section defined, but FLÜGEL (2000) selected as type region the Schöckel, a mountain north of Graz, ÖK50-UTM, map sheet 4229 Graz (ÖK50-BMN, map sheet 164 Graz) (N 47°11'54" / E 15°27'55").

**Reference section(s):** -

**Derivation of name:** After Schöckel (1,445 m), a mountain north of Graz (mind the variations in spelling of the mountain through time, Schöckl vs. Schöckel).

**Synonyms:** Peggauer Kalk (STANDFEST, 1881); Kalke des Raasberggipfel (MAURIN & FLÜGEL, 1958).

**Lithology:** Blue-white, mostly well-bedded banded limestones.

**Fossils:** -

**Origin, facies:** Presumably offshore shallow environment.

**Chronostratigraphic age:** Presumably Eifelian–Givetian.

**Biostratigraphy:** -

**Thickness:** Several (?) hundreds of meters.

**Lithostratigraphically higher rank unit:** Peggau Group (FLÜGEL, 2000).

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Schönberg Formation, Raasberg Formation.

**Overlying unit(s):** -

**Lateral unit(s):** Hochschlag Formation.

**Geographic distribution:** Styria, highland in the surroundings of Graz; ÖK50-BMN, map sheets 133 Leoben, 134 Passail, 162 Köflach, 163 Voitsberg, 164 Graz, 165 Weiz.

**Remarks:** SEELMEIER (1941) discerned three lithological types, grey-blue “semi-metamorphic” limestones, pure white limestones, and white-grey to grey-blue mostly well banded limestones.

**Complementary references:** EBNER et al. (2000).

## Hackensteiner-Formation / Hackensteiner Formation

BERNHARD HUBMANN

**Validity:** Valid; first description and formalization by GOLLNER et al. (1982: p. 64–69).

**Type area:** ÖK50-UTM, map sheet 4223 Weiz (ÖK50-BMN, map sheet 134 Passail).

**Type section:** The type sections between Laufnitzdorf and south of St. Jakob (N 47°08'56" / E 15°23'33") were described by GOLLNER et al. (1982).

**Reference section(s):** -

Remarks: GOLLNER et al. (1982) distinguished three series within the formation which were re-named and considered as members by FLÜGEL (2000).

**Derivation of name:** After the farmstead Hackensteiner north of Laufnitzdorf (Frohnleiten).

# Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



ERA	SYSTEM / PERIOD / SERIES / EPOCH	STAGE / AGE	DURATION Ma	Global Classification					
				ERATHM / ERA	SYSTEM / PERIOD / SERIES / EPOCH				
PALEOZOIC	PERMIAN	CHANGHSINGIAN / Dorashanian	251	PERMIAN	MID PERMIAN / GUADALUPIAN				
		WUCHIAPINGIAN / Dzhulfian	255						
		CAPITANIAN	260						
		WORDIAN	265						
		ROADIAN	270						
		PERMIAN	LOWER PERMIAN / CISURALIAN			KUNGURIAN	275		
						ARTINSKIAN	280		
						SAKMARIAN	285		
						ASSELIAN	290		
		PERMIAN	UPPER PERMIAN / CARBONIFEROUS			GZHELIAN	295	PERMIAN	LOWER PERMIAN / CISURALIAN
KASIMOVIAN	300								
MOSKOVIAN	305								
BASHKIRIAN	310								
PERMIAN	UPPER PERMIAN / CARBONIFEROUS			SERPUKHOVIAN	315				
				VISEAN	320				
					325				
PERMIAN	LOWER PERMIAN / CISURALIAN			TOURNAISIAN	330	PERMIAN	LOWER PERMIAN / CISURALIAN		
				335					
				340					
		345							
		350							
		355							
		359.2							
		PERMIAN	UPPER PERMIAN / CARBONIFEROUS	FAMENNIAN	365			PERMIAN	UPPER PERMIAN / CARBONIFEROUS
				FRASNIAN	370				
				375					
380									
385									
390									
395									
400									
405									
410									
PERMIAN	UPPER PERMIAN / CARBONIFEROUS	LOCHKOVIAN	415	PERMIAN	UPPER PERMIAN / CARBONIFEROUS				
		PRAGIAN	420						
		EMSIAN	425						
		EIFELIAN	430						
		GIVETIAN	435						
		MIDDLE DEVONIAN	440						
		FRASNIAN	445						
		450							
		455							
		460							
PERMIAN	UPPER PERMIAN / CARBONIFEROUS	WEN-LUD-LOCKLOW	465	PERMIAN	UPPER PERMIAN / CARBONIFEROUS				
		HOMERIAN	470						
		LUDFORDIAN	475						
		GORSTIAN	480						
		TELYCHIAN	485						
		AERONIAN	490						
		LLANDOVERY	495						
		RHUDDANIAN	500						
		HIRNANTIAN	505						
		PERMIAN	UPPER PERMIAN / CARBONIFEROUS			UPPER ORDOVICIAN	510	PERMIAN	UPPER PERMIAN / CARBONIFEROUS
MIDDLE ORDOVICIAN	515								
DARRIWILIAN	520								
475									
480									
485									
490									
495									
500									
505									
PERMIAN	UPPER PERMIAN / CARBONIFEROUS	PAIBIAN	510	PERMIAN	UPPER PERMIAN / CARBONIFEROUS				
		UPPER CAMBRIAN	515						
		MIDDLE CAMBRIAN	520						
		495							
		500							
		505							
		510							
		515							
		520							
		525							
CAMBRIAN	LOWER CAMBRIAN	44.6	530	CAMBRIAN	LOWER CAMBRIAN				
		488.3	535						
		490	540						
		495	545						
		500	550						
		505	555						
		510	560						
		515	565						
		520	570						
		525	575						
530	580								
535	585								
540	590								
542	595								



## Legend

- pelagic, offshore, siliciclastic
- pelagic, nearshore, calcareous
- shallow marin, neritic
- terrestrial-continental, coarse clastic
- terrestrial-continental, fine clastic
- evaporite (chloride, sulphate)
- rhyolite, dacite
- (basaltic) andesite, trachyandesite
- basalt
- phyllite
- mixed-facies (in corresponding colors)
- coal (may include several seams)
- position/age doubtful/controversial
- equal units
- older unit left | younger unit right
- hiatus
- unconformity
- GSSP
- Fm. Formation
- Ls. Limestone

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Cutout and English adaptation of the "Die Stratigraphische Tabelle von Österreich 2004": Geological Survey of Austria

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