

Description	USCS	Soil friction angle [°]			Reference
		min	max	Specific value	
Clayey sands	SC	30	40		[1],
Clayey sands, sandy-clay mix - compacted	SC			31	[3 cited in 6]
Loamy sand, sandy clay loam	SM, SC	31	34		[7],
Inorganic silts, silty or clayey fine sands, with slight plasticity	ML	27	41		[1],
Inorganic silt - Loose	ML	27	30		[3 cited in 6]
Inorganic silt - Dense	ML	30	35		[3 cited in 6]
Inorganic clays, silty clays, sandy clays of low plasticity	CL	27	35		[1],
Clays of low plasticity - compacted	CL			28	[3 cited in 6]
Organic silts and organic silty clays of low plasticity	OL	22	32		[1],
Inorganic silts of high plasticity	MH	23	33		[1],
Clayey silts - compacted	MH			25	[3 cited in 6]
Silts and clayey silts - compacted	ML			32	[3 cited in 6]
Inorganic clays of high plasticity	CH	17	31		[1],
Clays of high plasticity - compacted	CH			19	[3 cited in 6]
Organic clays of high plasticity	OH	17	35		[1],
Loam	ML, OL, MH, OH	28	32		[7],
Silt Loam	ML, OL, MH, OH	25	32		[7],
Clay Loam, Silty Clay Loam	ML, OL, CL, MH, OH, CH	18	32		[7],
Silty clay	OL, CL, OH, CH	18	32		[7],
Clay	CL, CH, OH, OL	18	28		[7],
Peat and other highly organic soils	Pt	0	10		[2],

Description	USCS	Soil friction angle [°]			Reference
		min	max	Specific value	
Well graded gravel, sandy gravel, with little or no fines	GW	33	40		[1],[2],
Poorly graded gravel, sandy gravel, with little or no fines	GP	32	44		[1],
Sandy gravels - Loose	(GW, GP)			35	[3 cited in 6]
Sandy gravels - Dense	(GW, GP)			50	[3 cited in 6]
Silty gravels, silty sandy gravels	GM	30	40		[1],
Clayey gravels, clayey sandy gravels	GC	28	35		[1],
Well graded sands, gravelly sands, with little or no fines	SW	33	43		[1],
Well-graded clean sand, gravelly sands - Compacted	SW	-	-	38	[3 cited in 6]
Well-graded sand, angular grains - Loose	(SW)			33	[3 cited in 6]
Well-graded sand, angular grains - Dense	(SW)			45	[3 cited in 6]
Poorly graded sands, gravelly sands, with little or no fines	SP	30	39		[1], [2],
Poorly-graded clean sand - Compacted	SP	-	-	37	[3 cited in 6]
Uniform sand, round grains - Loose	(SP)			27	[3 cited in 6]
Uniform sand, round grains - Dense	(SP)			34	[3 cited in 6]
Sand	SW, SP	37	38		[7],
Loose sand	(SW, SP)	29	30		[5 cited in 6]
Medium sand	(SW, SP)	30	36		[5 cited in 6]
Dense sand	(SW, SP)	36	41		[5 cited in 6]
Silty sands	SM	32	35		[1],
Silty clays, sand-silt mix - Compacted	SM	-	-	34	[3 cited in 6]
Silty sand - Loose	SM	27	33		[3 cited in 6]
Silty sand - Dense	SM	30	34		[3 cited in 6]