



**CURRENT RECORDED NORMATIVE GOALS
(FOR METRIC UNITS)**

JOINT MOVEMENT AND POSITION	SPEED DEGREES/SECONDS	PEAK TORQUE/BW RANGE				FLEX/EXT RATIO		EXT ROT/INT ROT RATIO		ABD/ADD RATIO		DORSI/PLANTAR RATIO		EVER/INVER RATIO	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Lumbar Flexion Semi Standing	60	340	361	*	*										
	90	*	*	*	*										
	120	*	*	*	*										
Lumbar Extension Semi Standing	60	447	483	*	*	49	49								
	90	396	414	*	*	59	59								
	120	432	447	*	*	51	51								
Shoulder External Rot. Mod. Neutral	60	39	51	30	39										
	180	33	45	24	36										
Shoulder Internal Rot. Mod. Neutral	60	57	78	42	54			64	71						
	180	51	69	39	51			66	71						
Shoulder Flexion Seated	60	75	101	69	89										
	180	66	86	60	78										
	300	27	36	63	80										
Shoulder Extension Seated	60	83	110	72	92	90	79								
	180	66	89	54	69	83	83								
	300	83	110	51	69	69	81								
Shoulder Abduction Seated	60	60	80	48	60										
	180	54	72	42	54										
Shoulder Adduction Seated	60	95	128	80	104					66	64				
	180	80	107	75	98					53	78				
Ankle Plantarflexion Seated	30	146	194	128	164										
	60	107	143	107	137										
	120	69	92	60	78										
Ankle Dorsiflexion Seated	30	39	51	48	63						26	39			
	60	33	45	45	60						31	43			
	120	27	36	33	42						39	54			
Ankle Eversion Seated	30	39	51	36	48										
	60	27	36	27	36										
Ankle Inversion Seated	30	36	48	42	57								87	81	
	60	33	42	36	45								90	80	
Knee Flexion Seated	*	*	*	*	*										
	*	*	*	*	*										
Knee Extension Seated	60	256	343	238	283	61	62								
	180	173	224	149	194	72	76								
	300	119	164	89	134	78	79								
Hip Flexion Supine	45	119	155	113	149										
	300	30	39	21	27										
Hip Extension Supine	45	188	244	170	230	64	66								
	300	101	131	83	110	29	25								
Elbow Flexion Seated	60	63	83	60	78										
	120	63	83	101	134										
Elbow Extension Seated	60	63	83	69	89	97	88								
	120	69	89	54	72	93	98								
Wrist Flexion Seated	60	12	21	12	21										
	120	6	12	6	12										
Wrist Extension Seated	60	6	12	6	12	57	57								
	120	6	12	6	12	97	97								

* The Biodex normative database is a compilation of published information to be used as unilateral goals. Peak Torque to body weight is expressed in a range which enables these goals to be recommended for various groups (Prepubescent patients do not apply) - references available upon request.
12/17/03