MOVEMENT COST TABLE (P. 34)

Terrain Type	Move Cost per Inch	Prohibited Movement Type/Unit Type
Base Move	1″	—
Clear	+0″[1]	n, s movement types
Paved/Road/Bridge	+0″[2]	n, s movement types
Rough	+1″	n, s, w movement types
Rubble	+1″	n, s movement types
Woods	+1″[3]	g, n, h, s, v, w movement types[4]
Water		
Surface Only	+0″	All except g, h, n, s movement types[5]
Depth 0″	+0″	n, s movement types
Depth 1″	+1″[6]	Ground and air vehicles[7], Infantry[8], IndustrialMechs[9]
Depth 2″+	+3″[6]	Ground and air vehicles[7], Infantry[8], IndustrialMechs[9]
Level Changes (up or down)[10]		
Per 1″ elevation	+2″ ('Mechs, ProtoMechs)	
Per 1″ elevation	+2″ (g, v movement types airborne)	
Per 1″ depth	+2″ (s movement type in water)	
Per 1″ elevation	+4″ (Infantry, Ground Vehicles)	

Note: Airborne units (including air vehicles and aerospace units) ignore all terrain conditions until they attempt to occupy the same space and level of them (including attempts to land or liftoff). If airborne units attempt to enter terrain prohibited to them, treat the result as a crash.

[1] +1″ Move cost for wheeled support vehicles without Off-Road (ORO) special ability.

[2] All Tracked or Wheeled units gain an extra 2″ of Move on any turn where the unit spends its entire Move on this terrain.

[3] Infantry units reduce Move cost to enter this terrain by 1″ (to minimum of +0″).

[4] Wheeled units with the bicycle (b) or monocycle (m) movement types may move through this terrain.

[5] Wheeled or Tracked vehicles with the Amphibious (AMP) special ability can move on water surfaces at a Move cost of +1″.

[6] This is the cost to move along the bottom of a water area. No additional cost applies if using submarine movement.

[7] Ground vehicles with the environmental sealing (SEAL) special ability may move along the bottom of a water area.

[8] Infantry units can move through water of any Depth only if they have the UMU special ability.

[9] IndustrialMechs can only enter water of 2″ depth or greater if they have the environmental sealing (SEAL) special ability.

[10] Infantry, ground vehicles, ProtoMechs, and WiGEs may not perform elevation changes greater than 1″. 'Mechs may not make elevation changes over 2″.

Unit Types Key	
Ground Units	Includes all units that use MV
'Mechs	Includes BattleMechs and IndustrialMechs
Infantry	Includes conventional infantry and battle armor
ProtoMechs	ProtoMech units only
Vehicles	Includes all motive types covered by Air, Ground, and Naval
Air	Combat or support vehicles using VTOL or WiGE movement types
VTOL	Combat or support vehicles using VTOL movement type
WiGE	Combat or support vehicles using WiGE movement type
Ground Vehicles	Combat and support vehicles using hover, tracked, or wheeled movement types
Hover	Combat or support vehicles using hover movement type
Tracked	Combat or support vehicles using tracked movement type
Wheeled	Combat or support vehicles using wheeled movement type
Naval	Combat or support vehicles using naval or submarine movement types
Sub	Combat or support vehicles using submarine movement type
Aerospace	Includes conventional fighters, aerospace fighters, small craft, fixed-wing, airship support vehicles, and DropShips

ATTACK MODIFIERS TABLE [p. 44, S.A.T.O.R., p. 42]

SKILL [S]	
Attacker	**Target Number**
Base Target Number	Skill Level

ATTACKER MOVEMENT MODIFIERS [A]	
Attacker	**Modifier**
Jumping Movement	+2[1]
Standstill/Immobile	−1[1]
Ground/Minimum Movement	+0

TARGET MOVEMENT MODIFIERS [T]	
Target	**Modifier**
Ground Movement/No Movement Mode	+TMM
Standstill/Minimum Movement	+0
Jumping Movment	+TMM+1
Strong Jump Jets (JMPS#)	+#
Weak Jump Jets (JMPW#)	−#
Submersible Movement	+TMM
Strong Submersible Movement (SUBS#)	+#
Weak Submersible Movement (SUBW#)	−#
Hull-Down	+0
Immobile	−4
Dropped by Airborne Unit	+3

OTHER MODIFIERS [O]	
Terrain	**Modifier**
Woods	+1[3]
Underwater	+1[2]
Partial Cover	+1
Attack	**Modifier**
Is an Area-Effect attack	+1
Is an Indirect Fire attack	+1[4]
Is an Indirect Artillery attack and spotter has TAG/LTAG within range of target	−1
Is attacking a secondary target (using Multiple Attack Rolls; see p. 174)	+1
Is from unit that is also spotting	+1

[1] Infantry (conventional and battle armor) do not use the standing still or jumping attacker movement modifiers.
[2] Only if attacker is also underwater (or is on the water surface and using TOR special); all underwater ranges are halved.
[3] Target has intervening or occupied Woods terrain.
[4] This becomes a +2 modifier if the spotting unit makes a weapon attack in the same turn as it spots (see *Indirect Fire Attacks*, p. 41). If the spotter is a remote sensor (see p. 88), apply an additional +3 Target Number modifier.
[5] Grounded Spheroid DropShips are always Immobile (see p. 32). Grounded Aerodyne DropShips may move or remain at a standstill, as with standard ground units. Regardless, this modifier applies to any grounded DropShip.

OTHER MODIFIERS (Continued)	
Attack	**Modifier**
Is using REAR special ability	+1
Is from IndustrialMech with no AFC special	+1
Is from Support Vehicle with:	
Basic Fire Control (BFC) special	+1
Neither AFC or BFC specials	+2
Is from a grounded DropShip	−1[5]
Is from unit with BattleMech Shield (SHLD) special	+1[6]
Is from unit with Fire Control Hit (per hit)	+2[7]
Is from unit with Heat Level > 0	+Heat lvl[8]
Is an artillery attack from an airborne unit	+1
Physical Attack Type	**Modifier**
Charge	+1
Death From Above (DFA)	+1
Anti-'Mech Infantry Attack	+1
Attacker is conventional infantry	+3
Target is transporting battle armor	+3[9]
Target	**Modifier**
Is airborne Aerospace	+2[10]
Is airborne DropShip	−2
Is airborne VTOL or WiGE	+1
Is Battle Armor	+1
Is Large (LG, SLG, or VLG specials)	−1
Is hull-down and not rear attack	+1
Is ProtoMech	+1
Has STL special active	Varies[11]

RANGE MODIFIERS [R]		
Range	**Distance**	**Modifier**
Short	Up to 6"	+0
Medium	>6" to 24"	+2
Long	>24" to 42"	+4[12]
Extreme	>42"	+6

[6] Applies only to weapon attacks, not physical attacks (see p. 45).
[7] Fire Control hit effects may apply multiple times. Does not apply to physical attacks.
[8] Does not apply to physical attacks (see p. 45).
[9] Applies if target is transporting battle armor via the MEC or XMEC specials (see p. 78), or as cargo.
[10] Includes fixed-wing support vehicles, conventional fighters, small craft, and DropShips. Only applies when target is airborne.
[11] For battle armor targets, Stealth (STL) adds +1 at Short and Medium ranges, and +2 at Long range. For all other units, Stealth adds +0 at Short range, +1 at Medium range, and +2 at Long range. Stealth may be toggled on and off (see p. 79).
[12] Artillery attacks, except for Artillery Cannons, have a minimum range modifier of Long (+4). Any range from 0"-42" is at Long range for them.

ARTILLERY RANGE AND DAMAGE TABLE (P. 47)

Artillery Name	Special	Max Range	Damage	Area of Effect Template
Arrow IV	ART-AIS/ART-AC	—	2	2″
Artillery Cannons				
Thumper Cannon	ART-TC	Medium	0*	2″
Sniper Cannon	ART-SC	Medium	1	2″
Long Tom Cannon	ART-LTC	Long	2	2″
Battle Armor Tube Artillery	ART-BA	—	1	2″
Cruise Missile/50	ART-CM5	—	5	2″
Cruise Missile/70	ART-CM7	—	7/2	6″
Cruise Missile/90	ART-CM9	—	9/4	6″
Cruise Missile/120	ART-CM12	—	12/5	6″
Long Tom	ART-LT	—	3/1	6″
Sniper	ART-S	—	2	2″
Thumper	ART-T	—	1	2″

UNIT MOVEMENT TYPE TABLE (P. 35)

Movement Type	Movement Code
Vehicles	
Hover	h
Naval	n
Submersible	s
Tracked	t
VTOL	v
Wheeled	w
Wheeled (bicycle)	w(b)
Wheeled (monocycle)	w(m)
WiGE	g
Infantry	
Foot	f
Jump	j
Motorized	m

DETERMINING CRITICAL HITS TABLE (P. 50)

2D6	'Mech*	ProtoMech	Vehicle
2	Ammo Hit	Weapon Hit	Ammo Hit
3	Engine Hit	Weapon Hit	Crew Stunned
4	Fire Control Hit	Fire Control Hit	Fire Control Hit
5	No Critical Hit	MP Hit	Fire Control Hit
6	Weapon Hit	No Critical Hit	No Critical Hit
7	MP Hit	MP Hit	No Critical Hit
8	Weapon Hit	No Critical Hit	No Critical Hit
9	No Critical Hit	MP Hit	Weapon Hit
10	Fire Control Hit	Unit Destroyed	Weapon Hit
11	Engine Hit	Weapon Hit	Crew Killed
12	Unit Destroyed	Weapon Hit	Engine Hit

* Roll twice for critical hits on IndustrialMechs, and apply both critical hits.

MOTIVE SYSTEMS DAMAGE TABLE (P. 51)

Unit Motive Type	2D6 Roll Modifier
Tracked/Naval	+0
Wheeled/Hovercraft	+1
VTOL/WiGE	+2

2D6 Roll	Motive Effects
2–8	No effect
9–10	–2″ Move, –1 TMM*
11	–50% Move, –50% TMM*†
12+	Unit immobilized

* A unit reduced to 0″ (or less) Move is immobilized

† If a fractional Move rating results, round it down. There is a minimum Move loss of 2″ and TMM loss of 1.

ADDITIONAL TERRAIN MOVEMENT COST TABLE (P. 57)

Terrain Type	Move Cost per Inch	Prohibited Movement Type/ Unit Type
Deep Snow	+1″[1]	Wheeled
Gravel Piles	+1″[1]	Naval, Rail
Hazardous Liquid Pool	As Water[1]	As Water
Heavy Industrial	+0″/+1″[2]	Naval, Rail
Ice	+1″[1]	Naval
Jungle	+2″	Vehicles
Magma		
Crust	+0″[1]	Infantry, Naval, Rail, Wheeled
Liquid	+1″[1]	All except 'Mechs
Mud	+1″[1]	Naval, Rail
Planted Fields	+0″	Naval, Rail
Rail	+0″/+1″[3]	Naval
Ultra Rough[6]	+2″	Naval, Rail, Wheeled
Ultra Rubble[6]	+2″	Naval, Rail
Sand	+0″/+1″[1, 4]	Naval, Rail
Swamp	+1″/+2″[1, 5]	Naval, Rail
Tundra	+0″[1]	Naval, Rail

Note: Airborne units (including air vehicles and aerospace units) ignore all terrain conditions until they attempt to occupy the same space and level of them (including attempts to land or liftoff). If airborne units attempt to enter terrain prohibited to them, treat the result as a crash.

[1] Units in this terrain type may bog down and/or suffer damage. See specific terrain rules.

[2] Only 'Mech units apply the +1″ Move cost in this terrain; all other units in this terrain apply +0″ Move cost.

[3] Rail units in this terrain must move along the rail and pay +0″ Move cost. All other units apply the +1″ Move cost.

[4] Only infantry units and wheeled units without the Dune Buggy (DUN) special apply the +1″ Move cost in this terrain.

[5] Only 'Mech and ProtoMech units apply the +1″ Move cost in this terrain; all other units in this terrain apply +2″ Move cost.

[6] BattleMechs with the LG special reduce the movement cost by 1″ per inch in this terrain type.

Unit Types Key	
Ground Units	
'Mechs	Includes BattleMechs and IndustrialMechs
ProtoMechs	ProtoMech units only
Infantry	Includes conventional infantry and battle armor
Vehicles	Includes all motive types covered by Air, Ground, and Naval
Air	Combat or support vehicles using VTOL or WiGE movement types
VTOL	Combat or support vehicles using VTOL movement type
WiGE	Combat or support vehicles using WiGE movement type
Ground	Combat or support vehicles using wheeled, tracked, hover, WiGE, or rail movement types
Hover	Combat or support vehicles using hover movement type
Rail	Combat or support vehicles using rail movement type
Tracked	Combat or support vehicles using tracked movement type
Wheeled	Combat or support vehicles using wheeled movement type
Naval	Combat or support vehicles using naval or submarine movement types
Sub	Combat or support vehicles using submarine movement type
Aerospace	Includes conventional fighters, fixed-wing and airship support vehicles, aerospace fighters, small craft, and DropShips

ADDITIONAL TERRAIN & ENVIRONMENT ATTACK MODIFIERS TABLE (P. 58)

ADVANCED TERRAIN MODIFIERS	
Terrain	**Modifier**
Heavy Industrial	+1
Jungle	+1
Planted Fields	+1*

TARGET MOVEMENT MODIFIERS	
Terrain	**Modifier**
Is Bogged Down	**

* Apply an additional +1 terrain modifier if target is an Infantry unit.
** Treat bogged down target as if it has a target movement modifier of +0.

ENVIRONMENTAL MODIFIERS	
Environmental Condition	**Modifier**
Blowing Sand	+2
Earthquake	+1 to +6
Electromagnetic Interference	+2*
Geyser	+2**
Heavy Fog	+1
Darkness	
Dusk or Dawn	+1
Moonless Night	+3
Night	+2
Pitch Black	+4
Rainfall	
Light to Heavy	+1
Torrential Downpour	+2
Smoke	
Light	+1**
Heavy	+2**
Snowfall and Hail	
Light to Heavy	+1
Sleet	+1
Blizzard	+2
Winds	
Wind Force 0 to 2	+0
Wind Force 3	+1
Wind Force 4	+2
Tornado, F1 to F3	+2**
Tornado, F4	+3**
Tornado, F5	+4**

* EMI only affects weapon attacks through an EMI-affected area of any size; does not affect infantry attacks.
** Applies only to attacks that pass through this environmental feature, regardless of attacker type.

PREVAILING WINDS TABLE (P. 63)

1D6 Roll	Wind Type	Force Category
1–2	None	0
3	Light Gale	1
4	Moderate Gale	2
5	Strong Gale	3
6	Storm	4

ATMOSPHERIC DENSITY ROLL MODIFIERS

Atmospheric Pressure	Modifier
Vacuum	No Wind
Trace Atmosphere	–2*
Thin Atmosphere	–1*
Thick Atmosphere	+1*
Very Thick Atmosphere	+2**

* Minimum modified result = 1; Maximum modified result = 6
** Maximum modified result = 8; On 7+ modified result, treat as Tornado

TORNADO FORCE RATING TABLE

2D6 Roll	Tornado Rating
2–3	F1
4–6	F2
7–10	F3
11	F4
12	F5

ALPHA STRIKE BUILDINGS TABLE (P. 73)

Building Type	Move Cost per Inch*	CF Range (Default)	Weight Capacity	Damage Absorption†		Collapse Damage (per each 4" height)
				Infantry	Non-Infantry	
Residential/Industrial/Military						
Light	+1"	1/3/5	2	1	0	0*
Medium	+2"	2/4/8	4	2	1	1
Heavy	+3"	6/12/18	6	3	2	2
Hardened	+4"	10/20/40	8	8	4	4
Castle Brian						
Heavy	+3"	40/80/120	—	10	10	10
Hardened	+4"	80/160/200	—	10	10	20

*No additional Move cost for Infantry (including battle armor); ProtoMechs Move cost in buildings is +1", regardless of type.

† See *Attacking Units inside Buildings*, below.

SPECIAL ABILITIES (PP. 76–91)

Special	Name	Page Ref
ABA	Anti-Penetrative Ablation Armor	83
AECM	Angel ECM	76
AFC	Advanced Fire Control	76
AM	Anti-'Mech	76
AMP	Amphibious	76
AMS	Anti-Missile System	76
ARM	Armored Component	76
ARS	Armored Motive System	77
ARTX-#	Artillery	82
AT#	Aerospace Transport	82
ATAC#	Adv Tactical Analysis Computer	82
BAR	Barrier Armor Rating	77
BFC	Basic Fire Control	77
BH	Bloodhound Active Probe	83
BHJ	BattleMech HarJel	77
BHJ2	BattleMech HarJel II	83
BHJ3	BattleMech HarJel III	83
BIM (#a)	Bimodal Land-Air BattleMech	83
BOMB	Bomb	77
BRA	Ballistic-Reinforced Armor	83
BRID	Bridgelayer	83
BT	Booby Trap	83
BTAS#	Battle Armor Taser	90
C3BSM	Boosted System C3 Master	80
C3BSS	Boosted System C3 Slave	80
C3EM	C^3 Emergency Master	82
C3I	C^3 Improved	82
C3M	C^3 Master	80
C3RS	C^3 Remote Sensor	82
C3S	C^3 Slave	80
CAP	Capital Weapons	84
CAR#	Cargo	77
CASE	Cellular Ammunition Storage	77
CASEII	Cellular Ammunition Storage II	77
CASEP	Prototype CASE	88
CK#	Cargo Transport, Kilotons	84
CNARC#	Compact Narc Missile Beacon	87
CR	Critical-Resistant	84
CRW#	Crew	84
D#	Door	84
DCC#	Drone Carrier Control System	85
DJ	RISC Viral Jammer – Decoy	89
DNI	Direct Neural Control System	84
DRO	Drone	84
DUN	Dune Buggy	85
ECM	Electronic Countermeasures	77
ECS	RISC Emergency Coolant	89
EE	Elementary Engine	77
ENE	Energy	77
ENG	Engineering	85
ES	Ejection Seat	85
FC	Fuel Cell Engine	77
FD	Flight Deck	85
FF	Firefighter	85
FLK#/#/#/#	Flak	78
FR	Fire Resistant	78
GLD	Glider ProtoMech	85
HELI	Helipad	85
HJ	RISC Viral Jammer – Homing	89
HPG	HyperPulse Generator	85
HT#/#/#	Heat	78
HTC	Trailer Hitch	90
IATM#/#/#/#	Improved ATM	86
IF#	Indirect Fire	78
IRA	Impact-Resistant Armor	86
IT#	Infantry Transport	78
I-TSM	Industrial TSM	78
JAM	SDS Jammer	89
JMPS#	Jump Jets, Strong	78
JMPW#	Jump Jets, Weak	78
LAM (#g/#a)	Land-Air BattleMech	86
LECM	Light ECM	78
LG	Large	86
LMAS	Light Mimetic Armor System	78
LPRB	Light Active Probe	86
LRM#/#/#/#	Long-Range Missiles	86
LTAG	Light TAG	86
MAG	Maglev	86
MAS	Mimetic Armor System	78
MASH#	Mobile Army Surgical Hospital	87
MCS	Magnetic Clamp System	87
MDS#	Mine Dispenser	87
MEC	Mechanized	78
MEL	Melee	78
MFB	Mobile Field Base	87
MHQ#	Mobile Headquarters	87
MSL#/#/#/#	Missile	87
MSW	Minesweeper	87
MT#	'Mech Transport	87
MTAS#	'Mech Taser	90
MTN	Mountain Troops	87
NC3	Naval C^3	87
NOVA	Nova Composite EW System	87
OMNI	Omni	78
ORO	Off-Road	78
OVL	Overheat Long	78
PAR	Paratroops	87
PNT#	Point Defense	87
PRB	Active Probe	82
PT#	ProtoMech Transport	88
QV	Quadvee	88
RAIL	Rail	88
RAMS	RISC Advanced PD System	89
RBT	Robotic Drone	89
RCA	Reactive Armor	88
RCN	Recon	88
REAR	Rear-Firing Weapons	78
REL	Re-Engineered Lasers	88
RFA	Reflective Armor	88
RHS	Radical Heat Sink System	88
RSD#	Remote Sensor Dispenser	88
SAW	Saw	89
SCAP	Sub-Capital	90
SDCS	SDS Drone Control System	89
SDS-C	SDS, Capital	90
SDS-CM	SDS, Capital Missile	90
SDS-SC	SDS, Subcapital	90
SEAL	Environmental Sealing	85
SHLD	BattleMech Shield	77
SLG	Super Large	90
SNARC#	Standard Narc Missile Beacon	87
SOA	Space Operations Adaptation	90
SRCH	Searchlight	90
SRM#/#	Short Range Missiles	90
ST#	Small Craft Transport	90
STL	Stealth	79
SUBS#	Submersible, Strong	79
SUBW#	Submersible, Weak	79
TAG	Target Acquisition Gear	90
TOR#/#/#	Torpedo	79
TRN	Trenchworks Engineers	91
TSEMP#	Tight-Stream EMP Weapon	90
TSI	Triple-Strength Implants	91
TSM	Triple-Strength Myomer	79
TSMX	Prototype TSM	88
TUR	Turret	79
UCS	Magnetic Clamp System	87
UMU	Underwater Maneuvering Units	80
VLG	Very Large	91
VR	Virtual Reality Piloting Pod	91
VRT	Variable-Range Targeting	91
VSTOL	Very-Short Take Off/Landing	91
VTH#	Heavy Vehicle Transport	91
VTM#	Medium Vehicle Transport	91
VTS#	Super-Heavy Vehicle Transport	91
WAT	Watchdog	80
XMEC	Extended Mechanized	78

SPECIAL PILOT ABILITIES (PP. 92–101)

Special Ability	Cost	Brief Description
Animal Mimicry	2	Quadruped unit gains mobility bonus and ability to demoralize opponents
Antagonizer	3	Unit can enrage an opponent for a brief period
Blood Stalker	2	Unit may focus its attacks better on a preferred target until it is destroyed
Cluster Hitter	2	Unit can deliver extra damage in an attack using missiles or flak weapons
Combat Intuition	3	Unit may move and resolve fire before any other unit acts
Cross-Country	2	Ground vehicle unit may enter some illegal terrain types, but at high Move cost
Demoralizer	3	Unit can intimidate an opponent for a brief period
Dodge	2	Unit can attempt to evade physical attacks
Dust-Off	2	Enables airborne unit types to land or liftoff in non-clear terrain
Eagle's Eyes	2	Unit gains (or augments) its ability to spot hidden units and avoid mines
Environmental Specialist	2	Reduces movement and combat modifiers in a preferred environment
Fist Fire	2	Unit delivers extra damage in physical attacks
Float Like a Butterfly	1–4	Unit may force an opponent to reroll an attack with this unit as the target
Forward Observer	1	Unit improves accuracy of indirect fire when used as a spotter
Golden Goose	3	Improves accuracy for air-to-ground strafing, strike, and bombing attacks
Ground-Hugger	2	Airborne unit may execute a double-strafe or double-strike air-to-ground attack
Headhunter	2	Can automatically identify enemy command units
Heavy Lifter	1	Enables increased carrying capacity with External Cargo rules
Hopper	1	Unit may avoid being reduced below 1 inch of Move by MP Hits
Hot Dog	2	Increases the Heat a unit can sustain before shutdown
Human TRO	1	Unit can ignore the Concealing Unit Data rules vs. non-hidden opponents
Iron Will	1	Unit can resist psychological attacks and receives a bonus during Morale checks
Jumping Jack	2	Improves accuracy of any attack made when the unit uses jumping Move
Lucky	1–4	Unit may reroll a limited number of failed attacks and Control Rolls per scenario
Maneuvering Ace	2	Reduces Move costs for woods/jungle terrain and aerospace atmospheric control
Marksman	2	If unit attacks while stationary, may score extra critical after delivering 1 damage
Melee Master	2	Unit increases its physical attack damage by half its Size (round up)
Melee Specialist	1	Unit delivers physical attacks with greater accuracy
Multi-Tasker	2	Unit can divide its weapon attack between two targets per turn
Natural Grace	3	Unit gains 360-degree field of fire; reduces Move costs in ultra-heavy terrain
Oblique Artilleryman	1	Improves accuracy and reduces scatter for all artillery weapon attacks
Oblique Attacker	1	Improves accuracy for indirect fire, and enables indirect attacks without a spotter
Range Master	2	Unit swaps normal range modifier for Medium, Long, or Extreme range with Short
Ride the Wash	4	Unit reduces atmospheric combat modifiers; may execute special air-to-air attack
Sandblaster	2	Unit improves accuracy and damage when only using AC and missile weapons
Shaky Stick	2	Airborne unit is harder to hit from the ground during air-to-ground attacks
Sharpshooter	4	If unit attacks while stationary, may score an extra critical after delivering full damage
Slugger	1	'Mech unit can improvise its own melee weapons from suitable terrain
Sniper	3	Unit reduces Medium, Long, and Extreme range modifiers by half.
Speed Demon	2	Unit can move faster than normal
Stand-Aside	1	Unit can pass directly through enemy units at extra Move cost
Street Fighter	2	Unit may pre-empt an attack against it by enemies in base contact
Sure-Footed	2	Unit receives bonus movement on paved or ice terrain and ignores skidding
Swordsman	2	Unit can deliver improved damage or critical hits when using MEL special
Tactical Genius	3	Enables command unit to reroll Initiatives once every 2 turns
Terrain Master		
(Drag Racer)	1	Ground vehicle unit gains extra speed on ice or pavement; avoids skidding better
(Forest Ranger)	3	Unit moves more easily through (and gains extra cover from) woods and jungle
(Frogman)	3	Unit moves more easily than others while fully submerged
(Mountaineer)	3	Unit moves more easily through level changes and rough terrain types
(Nightwalker)	3	Unit ignores combat modifiers for darkness
(Sea Monster)	3	Unit moves more easily and ignores attack penalties in water terrain
(Swamp Beast)	3	Unit moves more easily through mud and swamp terrain; ignores bog down in same
Weapon Specialist	3	Unit can deliver a more accurate attack as long as it uses only half its firepower
Wind Walker	2	Unit ignores atmospheric combat modifiers and gains a bonus to landing and liftoff
Zweihander	2	'Mech unit delivers more damage in physical attacks
Infantry Only		
Foot Cavalry	1	Foot-based infantry unit moves faster, even through difficult terrain
Light Horseman	2	Beast-mounted infantry unit moves faster, even through difficult terrain
Heavy Horse	2	Beast-mounted infantry unit can inflict extra damage at point-blank range
Urban Guerrilla	1	Infantry unit is harder to attack in urban terrain, and may "spawn" support

ADVANCED TERRAIN MOVEMENT COST TABLE (P. 137)

Terrain Type	Move Cost per Inch	Prohibited Movement Type/Unit Type
Woods		
Light[8]	+1″[1]	g, h, n, r, s, v, w movement types[2]
Heavy[8]	+2″[1]	Vehicles
Ultra-Heavy	+3″	All except Infantry
Water		
Surface Only	+0″	All except g, h, n, s movement types[3]
Depth 0″	+0″	Naval
Depth 1″	+0″	Ground, Infantry[4]
Depth 2″-3″	+1″[5]	Ground and Air vehicles, Infantry[4], IndustrialMechs[6]
Depth 4″-10″	+3″[5]	Ground and Air vehicles, Infantry[4], IndustrialMechs[6]
Depth 11+″	+4″[5, 7]	Ground and Air vehicles, Infantry[4], IndustrialMechs[6]
Rapids	+1″	As Water of appropriate Depth
Jungle		
Light[8]	+2″	Vehicles
Heavy[8]	+3″	Vehicles
Ultra-Heavy	+4″	All except Infantry

[1] Infantry units reduce Move cost to enter this terrain by 1″ (to minimum of +0″).
[2] Wheeled units with the bicycle (b) or monocycle (m) movement types may move through this terrain.
[3] Wheeled or Tracked vehicles with the Amphibious (AMP) special ability can move on water surfaces at a Move cost of +1″.
[4] Infantry units can move through water of any Depth only if they have the UMU special ability.
[5] This is the cost to move along the bottom of a water area. No additional cost applies if using submarine movement.
[6] IndustrialMechs can only enter water of 2″ depth or greater if they have the environmental sealing (SEAL) special ability.
[7] Non-submarine units at this depth (including units with UMU special) may suffer damage. See Water (Advanced) (p. 136).
[8] BattleMechs with the LG special reduce the movement cost by 1″ per inch in this terrain type.

ADVANCED TERRAIN ATTACK MODIFIERS TABLE (P. 137)

ADVANCED TERRAIN MODIFIERS	
Terrain	**Modifier**
Jungle	
Light	+1
Heavy	+2
Ultra-Heavy	+3
Woods	
Light	+1
Heavy	+2
Ultra-Heavy	+3

ALTERNATE MUNITIONS TABLE (P. 146)

Weapon	Attack Modifier	Damage	Required Special Ability
Artillery			
Air-Defense Arrow IV	*	See Rules	ART-AIS, ART-AC
Cluster	+0	See Rules	ART-AIS, ART-AC, ART-T, ART-S, ART-LT
Copperhead	*	See Rules	ART-T, ART-S, ART-LT
Flechette	+0	See Rules	ART-T, ART-S, ART-LT
Illumination	+0	See Rules	ART-AIS, ART-AC, ART-T, ART-S, ART-LT
Inferno IV	+0	See Rules	ART-AIS, ART-AC
Smoke	+0	See Rules	ART-AIS, ART-AC, ART-T, ART-S, ART-LT
Thunder or Thunder-Active	+0	See Rules	ART-AIS, ART-AC
Autocannon			
Armor Piercing	+1	+0*	AC
Flak	–2	+0*	AC
Flechette	+0	+0*	AC
Precision	–2*	+0	AC
Tracer	*	+0	AC
Bombs			
Air-to-Air Arrow IV	+0*	2	BOMB
Arrow IV	+0	+0	BOMB
Inferno (Advanced Rules)	+0	+0	BOMB
Laser-Guided	–2*	2	BOMB
Light Air-to-Air Arrow	+0*	1	BOMB
Rocket Launcher	+0*	+1	BOMB
TAG	+2	NA	BOMB
Thunder	+0	Mines	BOMB
Torpedo	+0*	+0	BOMB
Narc/iNarc			
ECM	+0	+0*	INARC
Explosive	+0	*	CNARC, SNARC, INARC
Haywire	+0	+0*	INARC
LRM/SRM			
Heat-Seeking	–2*	+0	LRM, SRM
Inferno	+0	*	SRM
Magnetic Pulse	+0	+0*	LRM, SRM
Mine Clearance	+0	+0*	LRM, SRM
Semi-Guided	–2*	+0	LRM
Smoke	+0	+0*	LRM, SRM
Swarm/Swarm-I	+0	+0*	LRM
Tandem Charge	+0	+0*	SRM
Thunder	+0	*	LRM

* See Item rules.

OFF-BOARD ARTILLERY ATTACK MODIFIERS TABLE (P. 151)

Situation	Modifier
Off-Board Artillery	+7
Each successive shot at the same target POI*	–1
Friendly unit acting as spotter when attack fired	–1
Spotter has LPRB, PRB or BH	–2
Spotter has RCN**	–1
Spotter made an attack during spotting turn	+1

* Applies only if a spotter has LOS to the target POI in the turn in which the attack is resolved.
** Do not apply this modifier if the spotter has LPRB, PRB or BH.

ARTILLERY COUNTER-BATTERY FIRE MODIFIERS TABLE (P. 153)

Situation	Modifier
Counter-Battery Fire	+7
Each successive shell from Target unit*	–1 (Max –4)

* Shell impact must be witnessed by at least one friendly unit with LOS to point of impact

CAPITAL AND SUB-CAPITAL ATTACK MODIFIERS TABLE (P. 156)

Situation	Modifier
Attacking in Atmosphere*	+2
Airborne Attack Modifiers	
CAP or SDS-C vs. Small Target**	+5
SCAP or SDS-SC vs. Small Target**	+3
MSL or SDS-CM vs. Small Target**	+0
Point Defense (1 damage)†	+1
Point Defense (2+ damage)†	Auto-Fail
Ground Attack Modifiers	
Air-to-Ground Attack	+0
Surface-to-Surface Attack (Non-Stationary)	+2
Ground Target designated by friendly TAG	–2

* If Atmospheric Pressure rules are used, +0 for Thin, Trace, or Vacuum
** Small Targets include all units that do not possess LG, VLG, or SLG specials
† Point defense only affects MSL or SDS-CM attacks

OFF-BOARD ARTILLERY FLIGHT TIME TABLE (P. 151)

Distance	Flight Time (turns)
34″	0
90″	1*
170″	2*
240″	3*
300″	4*
340″	5*

* Cruise Missiles (ART-CM#) compute their flight times as 1 + (Distance/170″) turns.

BATTLEFIELD INTELLIGENCE RATING TABLE (P. 154)

Item in Player's Force	BI Rating Points
Each ground unit with the Recon (RCN) special ability	2
Each non-DropShip aerospace unit	1
Each non-DropShip aerospace unit with the Recon special ability	2
Each DropShip aerospace unit (on-planet on in the field)	2
Each point of MHQ special ability in the battlefield	1

FIRE TABLES (P. 166)

FIRE STARTING BASE TARGET (INTENTIONAL/UNINTENTIONAL)				
Water	**Clear**	**Paved**	**Rough**	**Jungle**
—	11/11	—	12/12	7/10
Woods	**Building**	**Industrial**	**Magma**	
6/9	9/10	4/6	4/6	

Condition	Target Modifier
Terrain	
Deep Snow	+3*
Geyser	+3
Ice	+4*
Mud	+5*
Planted Fields	–2
Swamp	+5*
Tundra	+0*
Underwater	—
Atmospheric Pressure	
Vacuum	—
Trace	+5**
Thin	+3
Thick	–2
Very Thick	–4
Temperature	
Cold	+1
Hot	–2
Wind	
Wind Force 2	+1
Wind Force 3	+2
Wind Force 4	+4
Tornado (Any)	—**
Rain	
Light to Heavy	+1
Torrential Downpour	+2
Snowfall and Hail	
Light to Heavy Snow	+1
Sleet	+1
Blizzard	+2
Special Ability/Effect	
Indirect Fire (IF)	+1
Heat (HT)	–2
Inferno Munitions	Auto†
Fire Spreading	
From Downwind	+1
Across Water/Paved Terrain	+3 (per 2" distance)

* Fire in these conditions burn out by themselves after 1D6 turns unless set by Inferno munitions.

** Inferno munitions auto-set fires in these conditions. (Inferno fires in tornado automatically burn out after 1 turn.)

† Infernos may even ignite water surfaces (other than rapids), liquid pools, and paved terrain.

MORALE CHECK TABLE (P. 170)

Base Target Number = Unit's Skill Rating

Condition	Modifier
Attacked by Inferno Ordnance	+1
Attacked by Cruise Missile	+2
Unit is a BattleMech or ProtoMech	–2
Unit is an IndustrialMech	+0
Unit is a Combat Vehicle	+0
Unit is a Support Vehicle	+3
Unit is Battle Armor Infantry	–1
Unit is Conventional Infantry	+2
Unit is currently Routed	+3
Unit is a Drone/Robotic Unit	No Roll Required
Pilot has Iron Will Special Pilot Ability	–2
Infantry-Only Modifiers	
Attacker is a BattleMech	+1
Unit is inside a Building	–2
Additional Nerve-Recovery Modifiers	**Modifier**
Friendly Force Commander in LOS*	–2
Friendly Force Sub-Commander in LOS*	–1
Infantry-Only Modifiers	
Any Friendly Routed Units in LOS	+1
Friendly (non-Routed) 'Mechs in LOS	–2
Friendly (non-Routed) Vehicles in LOS	–1
Fire in LOS	+2

* A friendly force commander or sub-commander is only considered to be "present" when a unit has been specifically designated as the force's commander and this unit is active and on the map within 35 inches of the routed unit. Only one unit per lance (or Star) in a given force may be designated as a force sub-commander.

HIDDEN UNIT DETECTION RANGE TABLE (P. 167)

Probe Type	Range
Light Active Probe	6"
Active Probe	10"
Bloodhound Active Probe	16"

TERRAIN FACTOR AND CONVERSION TABLE

Terrain	TF (Light/Heavy/ Ultra-Heavy)	New Terrain
Clear/Rough	20	Sub-Level (1″)
Snow	2	Mud
Dirt Road	2	Rough*
Gravel Piles	10	Rough
Gravel Road	5	Rough*
Ice	4	**
Jungle	6/10/13	Rough
Magma Crust	3	Magma Liquid
Paved	20	Rough
Paved Road	15	Rough*
Planted Fields	3	Rough
Sand	10	Sub-Level (1″)
Tundra	7	Rough
Woods	5/9/12	Rough

* The Road still counts, but units must pay 1″ additional Move per inch traveled along them.

** If the underlying terrain is water, the area becomes water; otherwise ice is removed from the area and the underlying terrain remains undamaged.

AEROSPACE ATTACK MODIFIERS TABLE

RANGE MODIFIERS	
Range	**Modifier**
Short	+0
Medium	+2
Long	+4
Extreme	+6

TARGET TYPE MODIFIERS	
Target Element Type	**Modifier**
Airborne Aerospace	+2*
Airborne DropShip	–2
Airborne VTOL or WiGE	+1
Airborne Small Craft	–1

* Airborne aerospace also includes fixed-wing support vehicles, conventional fighters, small craft, and DropShips.

** Fire Control critical hits may apply multiple times.

AEROSPACE ATTACK MODIFIERS	
Attacker	**Modifier**
Air-to-Air	+0
Altitude Bombing	+0
Dive Bombing	+0
Strafing	+3
Striking	+1

MISCELLANEOUS MODIFIERS	
Condition	**Modifier**
Attacker is Tailing the Target	–2
Attacker is Support Vehicle with:	
Advanced Fire Control (AFC)	+0
Basic Fire Control (BFC)	+1
No AFC or BFC Special	+2
Fire Control Hit (per hit)	+2**
Is an Area-Effect Attack	+1
Overheating	+Heat Level (1–3)