

The tables below show the climate zone number for a wide variety of International locations. Additional information on international climatic zones can be found in ANSI/ASHRAE/IESNA Standard 90.1-2007 *Normative Appendix B – Building Envelope Climate Criteria*. The information below is from Tables B-2, B-3, and B-4 in that appendix.

International Climate Zone Definitions

Zone Number	Zone Name	Thermal Criteria (I-P Units)	Thermal Criteria (SI Units)
1A and 1B	Very Hot –Humid (1A) Dry (1B)	9000 < CDD50°F	5000 < CDD10°C
2A and 2B	Hot-Humid (2A) Dry (2B)	6300 < CDD50°F ≤ 9000	3500 < CDD10°C ≤ 5000
3A and 3B	Warm – Humid (3A) Dry (3B)	4500 < CDD50°F ≤ 6300	2500 < CDD10°C < 3500
3C	Warm – Marine (3C)	CDD50°F ≤ 4500 AND HDD65°F ≤ 3600	CDD10°C ≤ 2500 AND HDD18°C ≤ 2000
4A and 4B	Mixed-Humid (4A) Dry (4B)	CDD50°F ≤ 4500 AND 3600 < HDD65°F ≤ 5400	CDD10°C ≤ 2500 AND HDD18°C ≤ 3000
4C	Mixed – Marine (4C)	3600 < HDD65°F ≤ 5400	2000 < HDD18°C ≤ 3000
5A, 5B, and 5C	Cool-Humid (5A) Dry (5B) Marine (5C)	5400 < HDD65°F ≤ 7200	3000 < HDD18°C ≤ 4000
6A and 6B	Cold – Humid (6A) Dry (6B)	7200 < HDD65°F ≤ 9000	4000 < HDD18°C ≤ 5000
7	Very Cold	9000 < HDD65°F ≤ 12600	5000 < HDD18°C ≤ 7000
8	Subarctic	12600 < HDD65°F	7000 < HDD18°C

Marine (C) definition – Locations meeting all four of the following criteria:

1. Mean temperature of coldest month between 27°F (-3°C) and 65°F (18°C)
2. Warmest month mean < 72°F (22°C)
3. At least four months with mean temperatures over 50°F (10°C)
4. Dry season in summer. The month with the heaviest precipitation in the cold season has at least three times as much precipitation as the month with the least precipitation in the rest of the year. The cold season is October through March in the Northern Hemisphere and April through September in the Southern Hemisphere.

Dry (B) definition – Locations meeting the following criteria:

Not marine and

$$P < 0.44 \times (T - 19.5) \quad [\text{I-P units}]$$

$$P < 2.0 \times (T + 7) \quad [\text{SI units}]$$

Where:

P = annual precipitation in inches (cm) and

T = annual mean temperature in °F (°C).

Moist (A) definition – Locations that are not marine and not dry.

Canadian Climate Zones

Province	
City	Zone

Alberta (AB)	
Calgary International A	7
Edmonton International A	7
Grande Prairie A	7
Jasper	7
Lethbridge A	6
Medicine Hat A	6
Red Deer A	7

British Columbia (BC)	
Dawson Creek A	7
Ft Nelson A	8
Kamloops	5
Nanaimo A	5
New Westminster BC Pen	5
Penticton A	5
Prince George	7
Prince Rupert A	6
Vancouver International A	5
Victoria Gonzales Hts	5

Manitoba (MB)	
Brandon CDA	7
Churchill A	9
Dauphin A	7
Flin Flon	7
Portage La Prairie A	7
The Pas A	7
Winnipeg International A	7

New Brunswick (NB)	
Chatham A	7
Fredericton A	6
Moncton A	6
Saint John A	6

Province	
City	Zone

Newfoundland (NF)	
Corner Brook	6
Gander International A	7
Goose A	7
St John's A	6
Stephenville A	6

Northwest Territories (NW)	
Ft Smith A	8
Inuvik A	8
Yellowknife A	8

Nova Scotia (NS)	
Halifax International A	6
Kentville CDA	6
Sydney A	6
Truro	6
Yarmouth A	6

Nunavut	
Resolute A	8

Ontario (ON)	
Belleville	6
Cornwall	6
Hamilton RBG	5
Kapuskasing A	7
Kenora A	7
Kingston A	6
London A	6
North Bay A	7
Oshawa WPCP	6
Ottawa International A	6
Owen Sound MOE	6
Petersborough	6
St Catharines	5
Sudbury A	7
Thunder Bay A	7
Timmins A	7
Toronto Downsview A	6
Windsor A	5

Province	
City	Zone

Prince Edward (PE)	
Charlottetown A	6
Summerside A	6

Quebec (PQ)	
Bagotville A	7
Drummondville	6
Granby	6
Montreal Dorval Int'l A	6
Quebec A	7
Rimouski	7
Septles A	7
Shawinigan	7
Sherbrooke A	7
St Jean de Cherboung	7
St Jerome	7
Thetford Mines	7
Trois Rivieres	7
Val d'Or A	7
Valleyfield	6

Saskatchewan (SK)	
Estevan A	7
Moose Jaw A	7
North Battleford A	7
Prince Albert A	7
Regina A	7
Saskatoon A	7
Swift Current A	7
Yorkton A	7

Yukon Territory (YT)	
Whitehorse A	8

Mexican Climate Zones

Country	
City	Zone

Mexico	
Mexico City (Distrito Federal)	3
Guadalajara (Jalisco)	1
Monterrey (Nuevo Laredo)	3

Country	
City	Zone

Mexico	
Tampico (Tamaulipas)	1
Veracruz (Veracruz)	4
Merida (Yucatan)	1

International Climate Zones

Country	
City	Zone

Argentina	
Buenos Aires/Ezeiza	3
Cordoba	3
Tucuman/Pozo	2

Australia	
Adelaide (SA)	4
Alice Springs (NT)	2
Brisbane (AL)	2
Darwin Airport (NT)	1
Perth/Guildford (WA)	3
Sydney/KSmith (NSW)	3

Azores (Terceira)	
Lajes	3

Bahamas	
Nassau	1

Belgium	
Brussels Airport	5

Bermuda	
St George/Kindley	2

Bolivia	
La Paz/El Alto	5

Brazil	
Belem	1
Brasilia	2
Fortaleza	1
Porto Alegre	2
Recife/Curado	1
Rio de Janeiro	1
Salvador/Ondina	1
Sao Paulo	2

Bulgaria	
Sofia	5

Chili	
Concepcion	4
Punta Arenas/Chabunco	6
Santiago/Pedahuel	4

China	
Shanghai	3

Cuba	
Guantanamo Bay NAS (Ote)	1

Cyprus	
Akrotiri	3
Larnaca	3
Paphos	3

Country	
City	Zone

Czech Republic	
Prague/Libus	

Dominican Republic	
Santo Domingo	

Egypt	
Cairo	
Luxor	

Finland	
Helinski/Seutula	

France	
Lyon/Satolas	4
Marseille	4
Nantes	4
Nice	4
Paris/Le Bourget	4
Strasbourg	5

Germany	
Berlin/Schoenfeld	5
Hamburg	5
Hannover	5
Mannheim	5

Greece	
Souda (Crete)	3
Thessalonika/Mikra	4

Greenland	
Narsarssuaq	7

Hungary	
Budapest/Lorinc	5

Iceland	
Reykjavik	7

India	
Ahmedabad	1
Bangalore	1
Bombay/Santa Bruz	1
Calcutta/Dum Dum	1
Madras	1
Nagpur Sonegaon	1
New Delhi/Safdarjung	1

Indonesia	
Djakarta/Halimperda (Java)	1
Kupang Penfui (Sunda Island)	1
Makassar (Celebes)	1
Medan (Sumatra)	1
Palembang (Sumatra)	1
Surabaga Perak (Java)	1

Country	
City	Zone

Ireland	
Dublin Airport	5
Shannon Airport	4

Israel	
Jerusalem	3
Tel Aviv Port	2

Italy	
Milano/Linate	4
Napoli/Capodichino	4
Roma/Fiumicion	4

Jamaica	
Kingston/Manley	1
Montego Bay/Sangster	1

Japan	
Fukaura	5
Sapporo	5
Tokyo	3

Jordan	
Amman	3

Kenya	
Nairobi Airport	3

Korea	
Pyongyang	5
Seoul	4

Malaysia	
Kuala Lumpur	1
Penang/Bayan Lepas	1

Netherlands	
Amsterdam/Schiphol	5

New Zealand	
Auckland Airport	
Christchurch	
Wellington	

Norway	
Bergen/Florida	5
Oslo/Fornebu	6

Pakistan	
Karachi Airport	1

Papua New Guinea	
Port Moresby	1

Paraguay	
Asuncion/Stroessner	1

International Climate Zones (cont.)

Country	
City	Zone

Peru	
LimaCallao/Chavez	2
San Juan de Marcona	2
Talara	2

Philippines	
Manila Airport (Luzon)	1

Poland	
Krakow/Balice	5

Romania	
Bucuresti/Bancasa	5

Russia	
Kaliningrad (E. Prussia)	5
Krasnoiarsk	7
Moscow Observatory	6
Petropavlovsk	7
RostovNaDonu	5
Vladivostok	6
Volgograd	6

Saudia Arabia	
Dhahran	1
Riyadh	1

Senegal	
Kakar/Yoff	1

Country	
City	Zone

Singapore	
Singapore/Changi	1

South Africa	
Cape Town/D F Malan	4
Johannesburg	4
Pretoria	3

Spain	
Barcelona	4
Madrid	4
Valencia/Manises	3

Sweden	
Stockholm/Arlanda	6

Switzerland	
Zurich	5

Syria	
Damascus Airport	3

Taiwan	
Tainan	1
Taipei	2

Tanzania	
Dares Salaam	1

Country	
City	Zone

Thailand	
Bangkok	1

Tunisia	
Tunis/El Auoina	3

Turkey	
Adana	3
Ankara/Etimesgut	4
Istanbul/Yesilkoy	4

United Kingdom	
Birmingham (England)	5
Edinburgh (Scotland)	5
Glasgow Airport (Scotland)	5
London/Heathrow (England)	4

Uruguay	
Montevideo/Carrasco	3

Venezuela	
Caracas/Maiquetia	1

Vietnam	
Hanoi/Gialam	1
Saigon (Ho Chi Minh)	1