

A Novel Building Performance Based Climate Zoning for Ethiopia

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Supplementary Material

Appendix: f) List of appropriate passive design strategies in climate zones.

Climate Zone	Dominant passive design strategies (each letter and number represent the bioclimatic strategy category followed by design strategy. i.e. 'a' layout, '1' Long axis East to West.
CZ1	a1. Long axis East to West. b3. Compact planning. c2. Double – banking, temporary ventilation d4. Small, 15-25% of wall area e2. In 'N' and 'S' Walls at body height, also in the internal walls f1. No special protection necessary g2. Heavy, over 8hours time lag, h3. Heavy, over 8 hours' time lag
CZ2	2. Compact courtyard planning. 3. Compact planning. 3. No air movement required 5. Very Small, 10-20%of wall area 3. Has no climate-related values 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ3	2. Compact courtyard planning. 3. Compact planning. 3. No air movement required 5. Very Small, 10-20%of wall area 3. Has no climate-related values 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ4	1. Long axis East to West. 2. Open spacing, protect from winds. 1. Single-banking, permanent ventilation 4. Small, 15-25% of wall area 1. In 'N' and 'S' Walls at body height 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ5	2. Compact courtyard planning. 3. Compact planning. 3. No air movement required 5. Very Small, 10-20%of wall area 3. Has no climate-related values 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag

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CZ6	1. Long axis East to West. 2. Open spacing, protect from winds. 1. Single-banking, permanent ventilation 4. Small, 15-25% of wall area 1. In `N` and `S` Walls at body height 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ7	1. Long axis East to West. 3. Compact planning. 2. Double – banking, temporary ventilation 4. Small, 15-25% of wall area 2. In `N` and `S` Walls at body height, also in the internal walls 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ8	1. Long axis East to West. 2. Open spacing, protect from winds. 1. Single-banking, permanent ventilation 4. Small, 15-25% of wall area 1. In `N` and `S` Walls at body height 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ9	2. Compact courtyard planning. 3. Compact planning. 2. Double – banking, temporary ventilation 5. Very Small, 10-20%of wall area 2. In `N` and `S` Walls at body height, also in the internal walls 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag
CZ10	1. Long axis East to West. 3. Compact planning. 3. No air movement required 4. Small, 15-25% of wall area 3. Has no climate-related values 1. No special protection necessary 2. Heavy, over 8hours time lag, 3. Heavy, over 8 hours' time lag