

"Passive" Design in Building Technologies

生态型/自然调和型设计的多样性

The following building technologies represent sustainable responses to local environmental conditions.

灵活应对自然赋予的条件和提出的要求。根据地区条件的变化，采用柔软灵活的设计手法。

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										Increased collection and storage 大量集取、大量储存 蓄热窍门	Geothermal cooling 地热利用(降温)	Simple 单纯	Complex 复杂
Movable dome 可动型半圆顶屋顶	Berm (geothermal heating) 地下埋设	Heat-storing foundation 蓄热基础	Breathing wall 热呼吸墙	Sunken floor 接地地板+半地下	Building structure 围护结构	Heat-storing interior wall 内部蓄热墙	Water wall 亲水幕墙	Trombe wall 托隆布蓄热墙					
Attached sunroom 附属日光室	Insulation and airtightness 隔热气密		Heat-storing foundation 蓄热基础	Heat-storing ceiling 蓄热顶棚	Stand-alone collector 单集设置	Skylight 高位窗	Skylight with collector 集热板+自然采光	Balcony 阳台	Rooftop collector 屋顶用集热器	Slab on grade 接地地板	Ventilation due to temperature difference 温差换气效果		
Double-paneled window 双层玻璃窗	Roof collector 集热屋顶	Heat-storing floor 蓄热地板	Attic 顶棚隔层	Skylight 观瞻屋顶+天窗		Use of sunlight 日照的利用		Roof venting 高位窗的排气		Basement 地下室	Ventilation due to temperature difference 换气促进隔热		
Eaves-louver, screen 房檐/百叶窗帘+透光帘	Roof air collector 空气式集热	Photovoltaic panel 太阳能地板	Large opening 天窗开口	Sunlight 日光利用		Reflection 反射	Night air corridor 夜间接穿堂风的确保	Ventilation caused by prevailing wind 建筑风压的利用		Radiant cooling 地下冷辐射利用	Cooling using a water surface 水面冷却		
Exterior wall and ground insulation 外墙+地板隔热	Movable collector 可动式集热器	Heat-storing wall with nighttime shutter 附设百叶窗蓄热墙		Shading 遮阳	Insulation 隔热	Open interiors 开放型空间结构	Double facade 双层幕墙	Double facade 双层幕墙		Induction of cool underfloor air 地板下部空气的引入	Cooling using a water spray 洒水		
Roof and ceiling insulation 屋顶+顶棚隔热	Curtain wall 幕墙			Direct release 直接利用	Reflected solar heat prevention 反射的防止	Eaves 房檐	Open interiors 开放型空间结构	Double facade 双层幕墙		Cool air intake 集中冷却	Roof spraying with sunlight evaporation 屋顶洒水+通过日照促进蒸发		
				Cooling outdoor air 户外空气的冷却	Exterior air cooling 户外空气冷却	Restricted light entry 低位采光	Air corridor using eaves and walls 山房檐+侧墙形成回路	Double facade 双层幕墙	Cooling by nighttime radiation 夜间辐射冷却	Roof spraying with wind evaporation 屋顶洒水+通风促进蒸发			
				Indoor cooling 室内空气的冷却	Air corridor 回路形成	Louver 百叶窗帘	Reduced air corridor 节流效果	Double facade 双层幕墙 利用双层幕墙蓄热促进	Cooling by nighttime radiation & evaporation 夜间辐射+汽化冷却	Roof spraying for indoor cooling 室内循环空气的冷却			
				Cooling by skyward radiation 辐射冷却	Nighttime radiation 夜间辐射	Planting 栽植	Blocking the sunlight 遮阳	Cross-ventilation 通风	Solar chimney 太阳能烟道	Roof pond 屋顶水池			

High latitude (cold location)
高纬度寒冷地区

Low latitude (hot and humid location)
低纬度湿热地区

Breathing Wall: Hot air rises naturally, heating the house without a power source (fan).
热呼吸墙/利用热空气自然上升原理,不用动力也可以取暖

Attic: The entire attic is used as a heat collector.
顶棚隔层/利用顶棚隔层,使整个顶棚成为蓄热面

Building Structure: Building materials themselves are used for heating or heat storage.
墙体/利用结构部位集热和储热

Cooling using a water spray
洒水