

LIBRARY OF THE PAPAL THEOLOGICAL COLLEGE IN KRAKOW

克拉科夫罗马教皇神学院图书馆

The library concept is based on a free access space organization system. The majority of books (about 2/3) is directly accessible to the readers in order to allow study in the building. The free book access system minimizes the costs of transport and storage of books, and allows also for the free distribution of readers flow inside the building. The building plan is based on 6x6 m and 6x6.60 m structural grid, economic and functionally flexible. It is a basically a steel frame structure with doubled beams in both directions – the solution which allows for non-collision routing of the technical ducts. The roof structure is made of laminated wood and aluminum covering.

The main library space – open book storage is an open, 3-floor space under curved roof. The shape of the roof is designed upon the air flow analysis. It has a slope towards the south elevation in order to limit the direct sun penetration. The slopping roof directs the air is to move towards the northern part of the building where the heat is recuperated and air redistributed back to all floors. This roof geometry together with other pro-ecological design methods helps in minimizing the energy consumption and running costs of the building.





图书馆的概念是基于一个自由进出的空间组织系统。读者可以直接阅读大部分书籍（约2/3），以便在楼里学习。免费图书准入制度最大限度地减少书籍的运输和储存成本，也允许楼内读者人流的自由分布。建筑平面是建于6x6 m和6x6.60 m的结构柱网之上，经济且功能灵活。基本上它是在两个方向带有双梁的钢架结构，此解决方案支持技术管道的非碰撞路径。层压木和铝质覆盖层形成了屋顶结构。

图书馆的主要空间——开放式的书库，位于弧形屋顶下的开放式三层空间。屋顶的形状是基于空气流量分析而设计的。在南立面有一面斜坡以限制直射的日光穿透。斜面屋顶指引空气流向建筑的北面，在那里，热量得到回收并且空气重新分配到各个楼层。这屋顶的几何形状与其他支持生态设计方法有助于最大限度地减少建筑的能源消耗和运行成本。