



Accessible architecture design 建筑无障碍设计

(德) 乔希姆·菲希尔 编 常文心 译

图书在版编目(CIP)数据

建筑无障碍设计/(德)菲希尔编;常文心译.--

沈阳:辽宁科学技术出版社,2014.9

ISBN 978-7-5381-8820-2

Ⅰ.①建… Ⅱ.①菲…②常… Ⅲ.①残疾人—城市 道路—建筑设计②残疾人住宅—建筑设计 Ⅳ.

① U412.37 ② TU241.93

中国版本图书馆 CIP 数据核字 (2014) 第 196499 号

出版发行: 辽宁科学技术出版社

(地址: 沈阳市和平区十一纬路 29 号 邮编: 110003)

印刷者: 沈阳天择彩色广告印刷股份有限公司

经销者: 各地新华书店

幅面尺寸: 225mm×280mm

印 张: 20.5 插 页: 4

字 数: 150 千字

出版时间: 2014年9月第1版

印刷时间: 2014年9月第1次印刷

责任编辑: 陈慈良杜丙旭

封面设计: 于天睿版式设计: 张 迪责任校对: 周文

书 号: ISBN 978-7-5381-8820-2

定 价: 258.00元

联系电话: 024-23284360 邮购热线: 024-23284502 E-mail: lnkjc@126.com

http://www.lnkj.com.cn

Contents

目录









	DIN	1
	PER PROPERTY.	

Essays 序言8		
Goodbye to the Wheelchair Ramp 告別轮椅坡道 10 A plea for barrier-free planning and building as a matter of course <i>Philipp Meuser</i> 非障碍建筑 菲利普・莫伊泽	Barrier-free Tourism 无障碍旅游 How architecture can contribute Christine Degenhart 建筑如何影响旅游业 克里斯汀・狄根哈特	.36
Barrier freedom as a Challenge 无障碍自由 The responsibility of the housing industry <i>Lothar Marx</i> 房产业的责任与挑战 洛塔尔・马克思	Pictograms and Structural BarriersPrinciples for an international standard 国际通用残障指示标识Meinhard Erlacher梅恩哈德・厄莱克尔	

Projects 案例60	
AbenteuerHallenKALK, Cologne 卡尔克青年人冒险中心	Leonhardspark, Nuremberg 莱昂公园住宅区
Residential care home for the elderly, Steinfeld 老年人护理中心 68	Learning and training center, Ingolstadt 教育培训中心178
Apartments for the elderly, Domat/Ems 老人公寓78	Villa, Bordeaux 别墅188
ARoS - Århus art museum 阿洛斯艺术博物馆84	Mercedes-Benz Museum, Stuttgart 奔驰博物馆198
Basiliskenhaus, Vienna 巴斯里斯肯住宅 92	Musikerheim and village square, Gampern/Chiemsee 乡村广场 206
Blindeninstitutsstiftung, Regensburg 盲人机构98	St. Nikolaus parish center, Wipperfürth 圣尼右拉斯教会中心 212
Bode-Museum, Berlin 博德博物馆106	Prefabricated house, Oberstetten 活动房220
Interview with Hella Rolfes (architect) 对话海拉・罗尔费斯108	Apartment, Frankfurt 公寓式住宅230
Single-family house, Gstadt 单户住宅120	Senior center, Manching 老年中心238
Interview with Roman Schnellbach (client) 对话鲁曼・施奈尔巴克 122	Multengut Residence for the elderly, Muri 穆尔腾格特老年住宅 244
Interview with Florian Höfer (architect) 对话弗洛里安・霍菲126	Office and workshop building, Munich 办公室及车间大厦252
Footbridge, Esslingen 人行桥138	Interview with Oliver Holy (client, managing director of
Generationenhaus West, Stuttgart 多功能住宅144	ClassiCon) 对话奥利弗・霍利254
Haus der Architektur, Munich 建筑之家154	Villa Deys, Rhenen 戴斯别墅262
Horstmann-Haus Ruhrort, Duisburg 霍斯曼特疗养院160	Forecourt of the Gedächtniskirche, Speyer 施派尔纪念教堂前庭 270
Ideal Kitchen, University of Duisburg-Essen 理想厨房166	Eat-in kitchen, Graz 餐厅厨房274

Planning Requirements for Barrier-free Homes 无障碍住宅设计要求	32
Guidelines for Architects, Specialist Engineers, and Builders regarding DIN 18025 parts 1 and 2 德国工业标准18025第1、2部分规定设计师、工程师、建筑者准则	-
Disabilities and Specific Planning	
Requirements 残疾分类及具体要求 28	84
Comparative Observation 比较	37
Terminology 术语	88

Horizontal Access 横向通道	290
Vertical Access 纵向通道	300
Apartment 公寓	310
Building Services 服务设施	326

Architects, Picture Credits	32
设计师姓名及图片信息来源总表	

Accessible architecture design 建筑无障碍设计

(德) 乔希姆·菲希尔 编 常文心 译

图书在版编目(CIP)数据

建筑无障碍设计/(德)菲希尔编;常文心译.--

沈阳:辽宁科学技术出版社,2014.9

ISBN 978-7-5381-8820-2

Ⅰ.①建… Ⅱ.①菲…②常… Ⅲ.①残疾人—城市 道路—建筑设计②残疾人住宅—建筑设计 Ⅳ.

① U412.37 ② TU241.93

中国版本图书馆 CIP 数据核字 (2014) 第 196499 号

出版发行: 辽宁科学技术出版社

(地址: 沈阳市和平区十一纬路 29 号 邮编: 110003)

印刷者: 沈阳天择彩色广告印刷股份有限公司

经销者: 各地新华书店

幅面尺寸: 225mm×280mm

印 张: 20.5 插 页: 4

字 数: 150 千字

出版时间: 2014年9月第1版

印刷时间: 2014年9月第1次印刷

责任编辑: 陈慈良杜丙旭

封面设计: 于天睿版式设计: 张 迪责任校对: 周文

书 号: ISBN 978-7-5381-8820-2

定 价: 258.00元

联系电话: 024-23284360 邮购热线: 024-23284502 E-mail: lnkjc@126.com

http://www.lnkj.com.cn

Design Manual Accessible Architecture

无障碍建筑设计手册

Age and disability-friendly planning and building in the 21st century 21世纪的新兴建筑模式——适用于老年人和残疾人的建筑

Edited by Joachim Fischer and Philipp Meuser (徳) 乔希姆・菲希尔 菲利普・莫伊泽 编

Translated by Yan Ge 鄢 格 译





Steps are a very obvious barrier, both in buildings and public spaces. Excent $\text{E$

Looking back to the future

回顾过去 走向未来

LutzHeese 卢茨·汉斯

"We would like to put it on record here, that we are born to live in common: our society is like a vault of stones placed together, which would collapse if one did not sustain the other." This quotation from Seneca, the Roman philosopher and statesman, is most appropriate to the present publication *Accessible Architecture*. *Age and disability-friendly planning and building in the 21st century.* The architect creates the space or, to quote Seneca, the "vault of stones", within which we daily move. And because architecture is omnipresent in our lives, all of those who produce it, directly or indirectly, have a duty to society as a whole. Alongside architects, these individuals include interior designers, landscape architects, town planners and, above all, the political decision makers, developers and users.

A society's (self-)image is revealed not least in how it treats those people who particularly need its help. To a very special extent, this includes older or disabled people. As such, the question is not whether barrier-free building is necessary, but rather how it can best be implemented. The challenge lies in creating a social framework which enables human interaction, thus meeting the needs of today's society. However, it is not only about solidarity but, above all, about facts which make barrier-free building and age-friendly architecture into one of the most important issues for the future. We live in privileged times which offer us – at least in Europe – longevity which is unprecedented in human history. And a society which is constantly aging must of necessity engage with the subject of barrier-free building. The Bavarian Chamber of Architects has already been aware of the social significance of barrier-free building for many years. As far back as 1984, the Bavarian Chamber of Architects, in conjunction with the Bavarian Ministry for Work, Social Affairs, the Family and Women set up an advisory office for barrier-free building. Since then, it has been

possible to initiate and achieve a great deal for older or disabled people. The best example of this is the work *Planning principles for barrier-free housing on the basis of DIN 18025* (Parts 1 and 2) which, with just under 90,000 copies printed, has become a bestseller. The principles were published in 1992 by the Bavarian Chamber of Architects, in cooperation with the Bavarian Ministry for Work and Social Affairs, the Family and Women and the most senior building authority in the Bavarian Ministry of the Interior. They are attached to this publication which I hope finds numerous readers. I am confident that this publication makes a further important contribution to improving the future quality of life of our society.

The author is the President of the Bavarian Chamber of Architects.

罗马哲学家和政治家西尼加曾说过: "社会就如同是由许多石块堆砌而成的,人类生来就共同居住在这个大屋顶下。"用这句话来描述本书,再恰当不过。建筑在人类日常生活中无处不在,而建筑师,那些"建造社会大屋顶的人"有责任将整个社会打造成一个统一整体。

评价一个社会往往就要看其如何对待那些需要帮助的群体, 尤其是老年人和残疾人。优越的生活环境使得人类的寿命越 来越长,因此老年人会越来越多。从这个角度看来,再去讨 论非障碍建筑是否有必要已毫无意义,重要的是如何让其更 好的服务于人。因此,设计师所面临的挑战就是如何满足当 今社会的需求、创建自由活动的无障碍空间。

早在1984年,巴戈利亚设计师协会就提出了非障碍建筑的重要性,并同其他组织成立了非障碍建筑咨询机构,旨在为残疾人和老年人服务。1992年关于非障碍建筑原则的第一本书籍出版之后,备受欢迎,90000册全部售空。因此我坚信,这本书在改善我们的社会生活质量方面,会大有帮助,一定会吸引更多的读者。

巴戈利亚建筑师协会主席



Stepless access: all of us, even the able-bodied, find it useful sometimes in our lives. \pm the results of the results of

Contents

目录







Lothar Marx 房产业的责任与挑战 洛塔尔·马克思



Essays 序言8	
Goodbye to the Wheelchair Ramp 告别轮椅坡道	Barrier-free Tourism 无障碍旅游 How architecture can contribute Christine Degenhart 建筑如何影响旅游业 克里斯汀・狄根哈特
Barrier freedom as a Challenge 无障碍自由24 The responsibility of the housing industry	Pictograms and Structural Barriers

Meinhard Erlacher

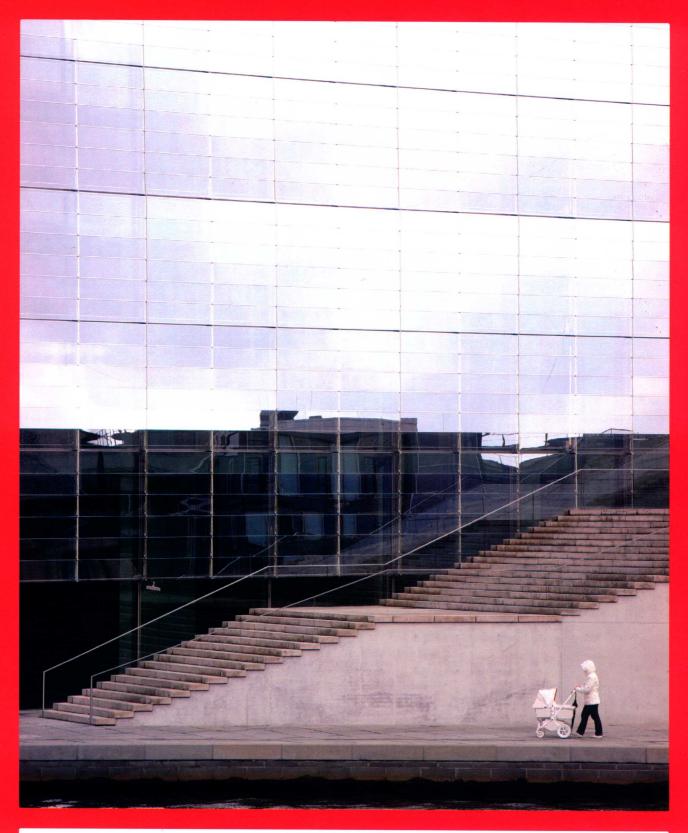
Projects 案例60		
AbenteuerHallenKALK, Cologne 卡尔克青年人冒险中心62	Leonhardspark, Nuremberg 莱昂公园住宅区	172
Residential care home for the elderly, Steinfeld 老年人护理中心 68	Learning and training center, Ingolstadt 教育培训中心	178
Apartments for the elderly, Domat/Ems 老人公寓	Villa, Bordeaux 别墅	188
ARoS - Århus art museum 阿洛斯艺术博物馆84	Mercedes-Benz Museum, Stuttgart 奔驰博物馆	198
Basiliskenhaus, Vienna 巴斯里斯肯住宅92	Musikerheim and village square, Gampern/Chiemsee 乡村广场。	206
Blindeninstitutsstiftung, Regensburg 盲人机构98	St. Nikolaus parish center, Wipperfürth 圣尼右拉斯教会中心	212
Bode-Museum, Berlin 博德博物馆106	Prefabricated house, Oberstetten 活动房	220
Interview with Hella Rolfes (architect) 对话海拉·罗尔费斯108	Apartment, Frankfurt 公寓式住宅	230
Single-family house, Gstadt 单户住宅120	Senior center, Manching 老年中心	238
Interview with Roman Schnellbach (client) 对话鲁曼・施奈尔巴克 122	Multengut Residence for the elderly, Muri 穆尔腾格特老年住宅。	244
Interview with Florian Höfer (architect) 对话弗洛里安・霍菲126	Office and workshop building, Munich 办公室及车间大厦	252
Footbridge, Esslingen 人行桥138	Interview with Oliver Holy (client, managing director of	
Generationenhaus West, Stuttgart 多功能住宅144	ClassiCon) 对话奥利弗・霍利	254
Haus der Architektur, Munich 建筑之家154	Villa Deys, Rhenen 戴斯别墅	262
Horstmann-Haus Ruhrort, Duisburg 霍斯曼特疗养院160	Forecourt of the Gedächtniskirche, Speyer 施派尔纪念教堂前庭	270
Ideal Kitchen, University of Duisburg-Essen 理想厨房 166	Eat-in kitchen. Graz 餐厅厨房	274

Planning Requirements for Barrier-free Homes 无障碍住宅设计要求28	2
Guidelines for Architects, Specialist Engineers, and Builders regarding DIN 18025 parts 1 and 2 德国工业标准18025第1、2部分规定设计师、工程师、建筑者准则	
Disabilities and Specific Planning	
Requirements 残疾分类及具体要求 28	4
Comparative Observation 比较28	7
Terminology 术语	8

Horizontal Access 横向通道	290
Vertical Access 纵向通道	300
Apartment 公寓	310
Building Services 服务设施	326

梅恩哈德・厄莱克尔

Architects,	Picture	Credits
设计师姓名及图	片信息来流	原总表



Stroller owners can experience just as many mobility problems as wheelchair users. 推婴儿车的人有时会同轮椅使用者一样,面临行动不便等问题。

Essays 序言



Goodbye to the Wheelchair Ramp

A plea for barrier-free planning and building as a matter of course

Philipp Meuser

告别轮椅坡道——非障碍建筑

菲利普•莫伊泽

Barrier-free architecture. This smacks of old people's home, housing for the disabled or hospitals. This term is still associated with buildings for "disadvantaged fringe groups". But barrier-free architecture is valued by far more people than the disabled or aged, for whom it eases participation in private and social daily life. Because being disabled does not only mean that one has to get to grips with one's environment with permanent physical constraints. A disability may also relate to a situation. For example, when one has to climb a staircase, loaded down with suitcases; when one cannot get the shopping trolley from the supermarket to the car in the car park; when one stands helplessly in front of a staircase with a pram or one does not know how to get the pram from the platform into the tram carriage. That is why there are now low-rise trams and buses with appropriately modified platforms. The new technology being used in public transport is an excellent example of just how much broader the definition of "disabled" has become – and how universal the solutions for barrierfree access can be. In this case, there is a rule of thumb: if a small child can get on without difficulty, it is just right for an old person with a walking stick; that which helps a mother with a pram is also of assistance to people with crutches, walking frames or wheelchairs.

Therefore, it is no longer a question of fulfilling the politically correct and meanwhile completely unrealistic demand of making a building "wheelchair-friendly", but rather a question of creating a freedom from barriers which is not stigmatised or intended to serve as an a alibi but which is a natural matter of course.

What barrier freedom means

German legislation also reflects this credo. In the so-called Equality for Disabled Persons Act, which is supposed to regulate implementation at national level, it is stated that: "Buildings and other structures, means of transport, technical tools, information processing systems, acoustic and visual sources of information and communication facilities and other designed areas of living are barrier-free if they are accessible to and usable by disabled people in the normal way, without special difficulty and completely without assistance." ¹

Barrier-free building means that the world we create ourselves – from pavement to house to light switch – must be so designed that it is open to all people, irrespective of their given physical condition or age, without assistance and without restriction. As such, the



Everyday barriers: that which appears amusing and curious at first glance is often an obstacle for disabled people.

空间中有趣而引人注目的摆设往 往就成为了残疾人的障碍。



Disabled WC at Tashkent International Airport.

塔什干国际机场残疾人专用 洗手间。



Uninsulated district heating pipeline in a residential area.

小区中供热系统管道处理。_

barrier-free design of human living space has long been defined as "building and design for all" or "people-friendly building". Numerous reports and expert opinions from Germany and the European neighbouring countries have concluded that an environment accessible without barriers is absolutely essential for around ten per cent of the population, necessary to some extent for up to 40 per cent, and simply comfortable for 100 per cent.² Barrier-free building therefore means not only building without thresholds, steps and stairs, but planning and building with the aim of creating an environment which is functional, and both easily accessible and usable. One good example for this simple rule is the toilets in public buildings.

Building for a new society

While the need for convenience is not restricted to a minority, barrier-free building no longer represents a design challenge for fringe groups, but is rather the expression of the emancipation of society as a whole. This is already evidenced in the official language for, in using the term "barrier freedom", it achieves general validity, indeed, an egalitarian character. Those people whose capacity to participate in society was once

denied, in that they were belittled as "idiots", "madmen", "cripples" or "half-wits", are now people with impairments, who have long fought against their exclusion and have had to battle hard to achieve social integration. In 1919, for example, Wilhelm von Kügelgen, the adjutant of General Field Marshal Paul von Hindenburg lamented on seeing those damaged in the First World War's rain of steel: "The individual is measured against the mass and, where a major element is missing, is punished with the title of 'cripple', used entirely in the old sense of inferiority [...]", and he then demanded that: "Therefore, we do not wish to call those whose bodies have been struck by the axe of fate 'cripples'".3

The consequences of the First World War were instrumental in disabled people being recognised as a social group for the first time. At that time, numerous injured survivors thronged the streets of the Weimar Republic – as beggars, outcasts and pariahs. Their miserable impoverishment was immortalised in unsparing portraits by artists such as George Grosz or Otto Dix. After the First World War, organised medical field services, which first appeared during the German-Danish war of 1864, gave to society a sizeable social



Small ad in a magazine c. 1920: after the First World War (1914–1918) the demand for prosthetics increased because of the high number of war casualties.

杂志上的一则小广告写着:第一次世界大战之后,要求 对战争伤亡人员补偿的呼声越来越高。

group which had not existed in this form previously: invalids.⁴ Civilian forms of crippling disfigurement in the shape of physical and mental disabilities had previously been locked up in asylums or institutions, out of society's sight. Orthopaedic medical institutions which developed in the 18th century out of the predominantly clerical tradition of plague houses and monasteries, prepared the ground for the institutionalised handling of sick or disabled fellow men.

The term "physically disabled" appeared for the first time in 1925 and may be seen as an indication of society's gradual opening, now accepting these people and trying to integrate them. The generally valid principle of enabling each person to lead an independent and self-determined life at all times marks not only a social transformation, but also one of the great challenges of the second German republic.

The guidelines for this challenge were laid down right at the start, in the first three Articles of the German Basic Law, valid since 1949.But, alongside the rights which disabled people may demand under law, a second development will lead nolens volens to a gradual transformation of the built material

environment: our society is currently undergoing an aging process of hitherto unprecedented dimensions. Thanks to medical research, the life expectancy of the inhabitants of the western world is constantly increasing, and they are becoming ever older. For this reason alone, there are always more people who require care and assistance; people who, because of their age are restricted – therefore disabled – and need support in order to participate in society. Parallel to old age, demographic statisticians have noted a constant reduction in the birth rate which is already too low to maintain the status quo. The population of the western industrial nations is shrinking. In the foreseeable future, the disparity between many old people and few young will lead to tectonic shifts which will destabilise not only the hitherto reliable pension and healthcare systems.

In order to overcome the constantly growing need for care and support within society which goes hand in hand with over-aging, new approaches to housing and living are required, in order to integrate old and young equally. As such, the Federal Government has specifically created an action campaign for multigenerational houses.