

Prospects for the Housing Industry

Solutions and services for commercial housing







We understand the housing industry

Do you know that feeling of not having to explain a lot before people understand you? Of being on the same wavelength without many words? Because the business partner knows your needs because he is a specialist?

Service – by professional partners

TECE supports building processes in the housing industry – from the first draft through to the turnkey handover of the housing. The area of expertise of the housing technology specialist from the Muensterland is bathroom and sanitary technology. Here the key account management at TECE can look back on many years of specific experience. A contact person accompanies the construction company throughout the entire building process – and is always there when he is needed.

Security through solutions which conform with industrial standards

Security is an important strategy approach in the commercial use of housing. It is a question of protection of the residents' health. At the same time it is a matter of protection and preservation of the valuable building itself. Each investment is oriented on the life of the building, on durability. Products and solutions from TECE conform with industrial standards and are in accordance with recognised technical regulations. For example the Potable Water Ordinance, which ensures that hygienic water arrives at the tenant's home.

Return on investment through intelligent systems and platform concepts

The housing industry aims at achieving a return on investment. TECE reflects two important return on investment factors in the housing industry: Firstly, industrial prefabrication at TECE reduces complexity on site, minimising fault areas and accelerating building processes. Secondly, many TECE product systems can be scaled: On a technical platform the entire rent income range is represented – through different fine building solutions.

1,143 x time-saving, quality, cost certainty and efficiency

When 1,143 housing units are to be renovated, then the 1,143 bathrooms that are included in the work represent the central challenge. TECE recommends itself as a specialist for bathroom renovation. From a job lot of 1 to 1,143, and more. Through industrial prefabrication and simultaneously flexible on-site solutions. Through scalable systems which show apartment rent between \leq 4.50 and \leq 14.50 on the same technical basis. And through housing technology which is modern and barrier-free, either as standard or as a simple option. We call that intelligent housing technology.

Renovation for the generations

60 percent of bathrooms with optional supporting folding handrail by the toilet, 100 percent with floor-level shower channel.

Penthouse apar premium operat

Premium

and complete sets on toilet

Wall modules

60 complete pre-assembled wall modules delivered just in time. In this way building times are reduced considerably and a craftsman bottleneck solved

Individual rebuilding

Individual bathroom renovation with TECEprofil elements. Pre-wall system for tailored renovation for new tenants.

						_															
	Contraction of the		1.7	-			(Veral)								1			1	- 14		
			Berlinson I.	(merenes a				1992.			C			-		_	-		-		
			Training to the	Statement of the				iever i	_		11.11.1		4.5	- H	i 🖬 🎹		LUC I				
		-	the second secon		TELER B		Statement of the local division in which the local division in the	a ier i			HENCH		HITTONY	1541br		10	THE R	ILLUI MA	1 1	RETENS	
1			Concession,	IN THIS !			and the second second	m mi			THE R. L.		ENTENIE	E-AT-				IIII III		THEFT PROPERTY.	
				Contractor of the		-				Real Property lies		-	ENTENIE	STORE OF THE OWNER	in in	. 10	THE O			MINT PRIME	
				THE REAL PROPERTY NAMES	the second second	and the second se			-	Contraction of the local division of the loc	STEREO,	the second s	No. I Have	fin an	111	10	LINE IN	ALL DE LE	-	THE TRUTH	
		-				and the second second	12-12			-	THE R. P. C. S.		FRIET	Saute -			THE		1	THEFT	
		-			and the second second					THE REAL	TIME DE L		ANTIMIA	f=nhan					1	10 10 11	
			and the second s	ALC: N		Contraction of the		1000		A ST I WE ST I	STREET WHEN		Million I	1 Internet	111					THEFT	
							12.021			BRARKO	IIIII		ANTERIA DE	111111					-	UNITATI	
1				THE R.				COLUMN 1		LAILAI	STATES.		THE R. L.	I TITA			n m n	THUR	I all	IN FIGURE	1.4
and the			Concession of	Same?	INTERNA R		CIER !			FRIDI	I III	and the	and the second	Period.	10	110	LOT T		and a		-
de la			16 . B			ayor.	7	A BAR	-	COMP.	-		ALC: N	1000							

Toilet technology

17

(ELSTIN

Penthouse apartments fitted with TECElux. Including height adjustment for the toilet ceramics and air filter.

Underfloor heating

Added comfort through warm feet in the bathroom: TECEfloor is an ideal renovation solution.

Shaft renovation

Piping renovation in record time using the TECEIo-go push-fit system. Piping installation in shafts and floors using the same system.

Retrofitted shower

channel

Floor-level showering with shower channels: Thanks to a super shallow drain, only 67 millimetres of floor structure are needed.

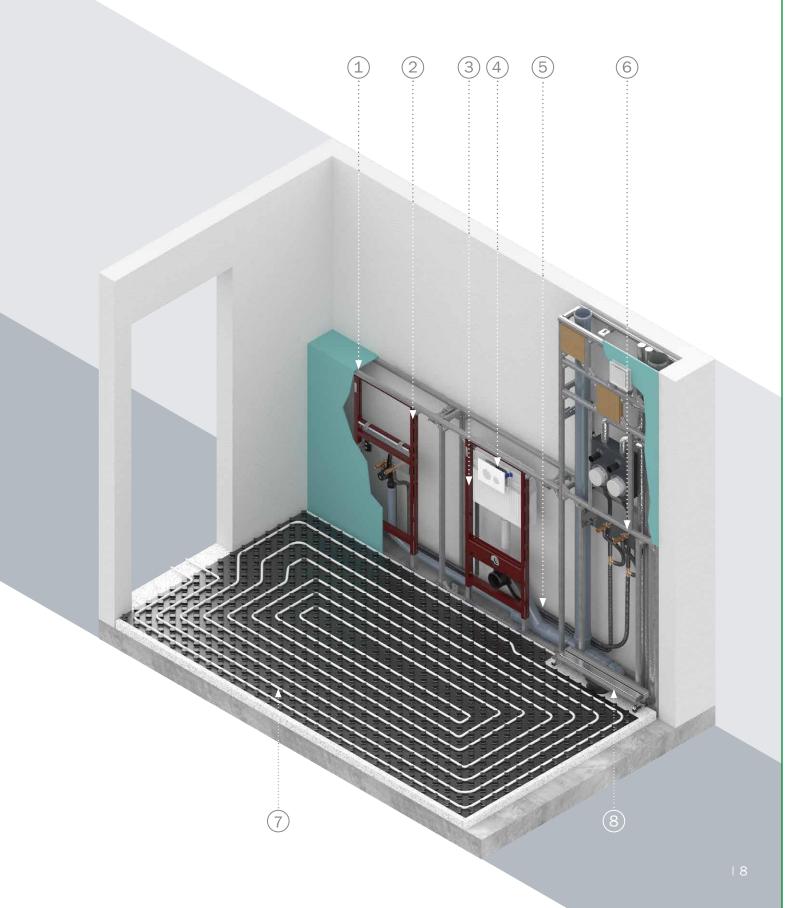
More flushing flow

The TECE universal cistern enables the adjustment of the flush flow to the piping system – for safe flushing even of older drain systems.

We have thought up all sorts ofthings for your bathroom.

Concepts for the housing industry

The TECE solution approach is always the answer to the question: Can this be done better, faster, more easily – more attractively? A system of intelligent solution modules takes the worries out of bathroom construction and renovation for the housing industry. From the finished delivered wall module to the sanitary shaft, the channel for floor-level showers, through to underfloor heating: TECE offers solutions which the housing industry needs.





A prefabricated wall module, produced industrially by TECE. It is individually planned, produced and delivered readyto-connect just in time. The basis is the tried-and-trusted TECEprofil installation system.

(2) Washstand module

TECE universal mounting unit for sanitary ceramics or washstand furniture.

(3) Toilet module

Used millions of times: the TECE universal cistern with flush flow and flush volume adjustment for new and older buildings. Guaranteed safe flushing for differently constructed drain systems. Optionally with support folding handrail; prepared for ventilator, shower toilet, etc.

4 Toilet flush plates

TECE flush plates for the TECE universal cistern are available in all design and price categories. From plastic through to glass and stainless steel, and even as vandalism-safe versions for semi-public areas. Together with a matching urinal flusher.

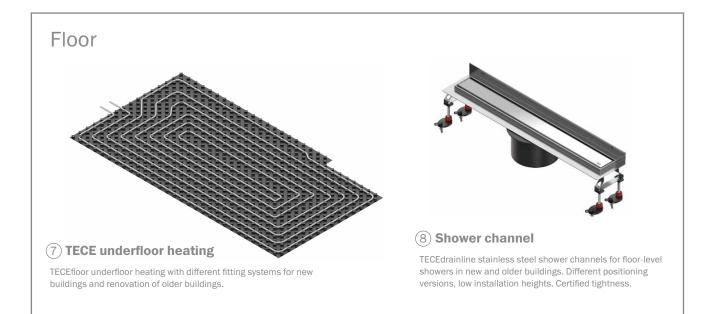
5 Piping systems

There is a choice between two TECE piping systems for new buildings and renovation work: the high quality TECEflex, and alternatively TECElogo for fast and almost tool-free push-fit connections. Together with high-quality house drain and ventilation piping. Shaft



(6) Piping renovation

Prefabricated sanitary shafts for fast and fixed cost piping renovation in large housing units. The shafts are delivered ready-to-connect just in time. Here too, there is the choice between TECEflex or TECElogo piping systems, high-quality house drain and ventilation piping, and pre-fitted accessories (meters, ventilators).



Solutions for bathroom building, bathroom renovation, shaft and piping renovation

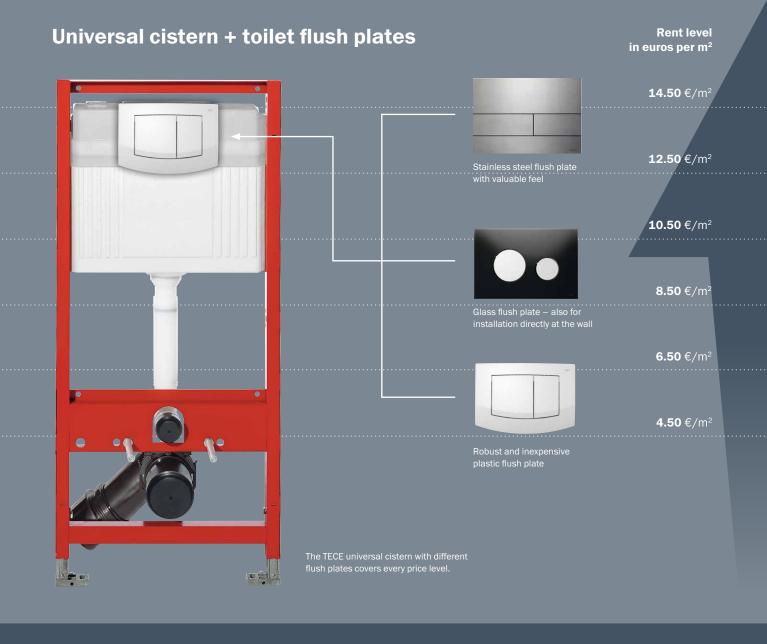
Bathrooms are the neuralgic point in commercial housing, where technology, comfort, functionality and design requirements all meet. It is not for nothing that the bathroom is the room where most investment volume takes place in each housing unit – with the risk that here too, quite a lot could go wrong.

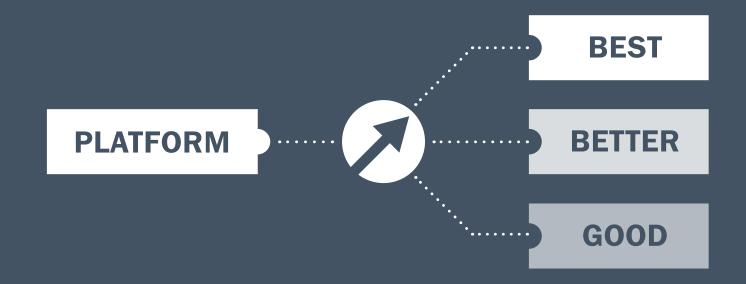
TECE is a complete supplier for all technology built into the bathroom – and for all interfaces to the sanitary items and functional elements. This permits computer-supported planning of bathrooms and interfaces, and a maximum reduction of the complexity in the construction process.

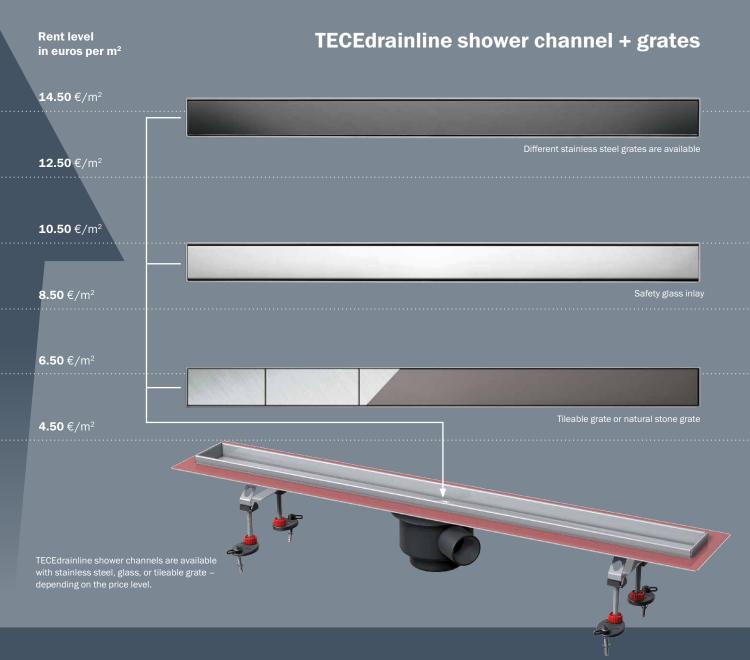
A technology for the entire house, individual solutions for each housing unit and every rent level – all from TECE.

Platform strategy: A technical basis, individual solutions for every rent level

With TECE solutions one concept reappears again and again: the platform strategy. A tried-and-trusted technical basis is installed into the building. TECE also offers different prefabricated solutions. For the housing industry this means: Throughout the building there are the same toilet cisterns, the same basic shower channel body, making work and inspection easier. On the other hand, the visible and operating elements can be chosen from many different options. On the ground floor the toilet is flushed with an inexpensive plastic plate, in the penthouse with a stainless steel flush plate. The shower channel has a stainless cover in the basic segment, and a glass inlay in the comfort segment. In this way the landlord can retain price flexibility, as shown in the flush plate, shower channel cover and tileable shower channel covers. In this way each housing unit can be given an individual style.







Technology for the toilet from TECE: It flushes and flushes and flushes

From the toilet flush it is above all expected that it flushes. TECE has proven this a million times with the universal cistern. But it can do more: The adjustable flush quantity and a variable flush flow enable adjustment to different toilet ceramics and drain pipe dimensions. This avoids problems with rimless toilets that might splash over, or with blocked drain pipes. Around the cistern there is a generous range of flush plates and functional elements.



The TECE universal cistern has proven its worth a million times. Thanks to integration into the TECEprofil pre-wall system (1) folding support handrails (2) can be prepared concealed. A wide range of flush plates (3) in all price classes and in different materials permits clear and cost-appropriate bathroom concepts.

More or less water? The award-winning flush valve in the TECE cistern permits adjustments of the flush water volume and the flush flow in both directions. A universal solution against splashing ceramics or old drain pipes in chronic danger of blockages.



TEGA

4,5 7,5 7,9

PS

SP201 DIE D

õ

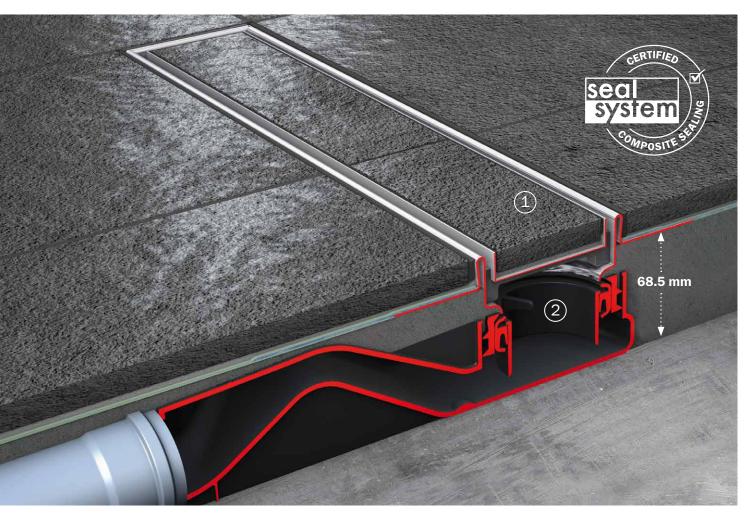
0



Floor-level showering – for renovation, too

The shower channel is an inexpensive possibility for the housing industry to realise up-to-date and floor-level bathroom architecture. TECE is a pioneer of the shower channel and offers a comprehensive range of jointless, easy-toclean and maintenance-friendly stainless steel channels. As a special solution for older building renovation TECE even also has a really flat shower channel in the range, which only requires 68.5mm floor structure.

By the way: The entire TECE range of shower channels and floor drains is Seal System certified. In this unique combination test the water tightness of TECE floor drains is checked using different composite sealing products which are readily available on the market. There are more than 600 certificates.



Ideal solution for bathroom renovation: TECEdrainline shower channels (1) with a really flat drain (2) require a floor structure height of just 68.5 millimetres. They are Seal System certified and tested with virtually all conventional composite sealants.

Shower channels allow floor-level tiling and are as such barrier-free. In combination with anti-slip flooring they represent an inexpensive and optically attractive solution which suits all generations. TECE channels and floor drains are Seal System certified for all usual composite sealing products available on the market.

Easy to clean thanks to the jointless stainless steel main body. The cover can be easily removed; the stainless steel channel is easy to clean.



The main arteries of the house

Computer-supported planning – security as long as the life of the building

Residential buildings are often fitted with miles of supply and drain piping. TECE supports planners and installers in the housing industry with computer-supported planning, even for complex buildings. This not only optimises the building processes, avoids mistakes and reduces costs – but also ensures that drinking water requirements are assured. And in the end quality here avoids costs and trouble – for the whole life of the building.

There is a choice between two systems - quality for specific requirements

TECE offers two universal potable water piping systems, which are suitable for all applications and satisfy the requirements of the Potable Water Ordinance with state-of-the-art technology. TECEflex has been trusted as a premium composite piping system in the housing industry for more than 25 years. As a push-fit system which manages without pressing tools, TECElogo optimises processes, especially on single renovation sites when time is of the essence.

Underfloor heating: The single source system

With TECEfloor TECE has a complete underfloor heating system in its range. All components come from TECE – from the laying solution through to connection and regulating technology. The minimal installation height of just 35 millimetres for the dry construction system makes this underfloor heating ideal for installation in older buildings.



The TECEflex composite piping system – universal, safe, immune to installation mistakes, and tried and trusted for 25 years.

Inexpensive and fast because there is almost no need for tools: the TECElogo composite push-fit system.

Minimal installation height, all components from one source: TECEfloor is based on the tried-and-trusted TECE piping systems.

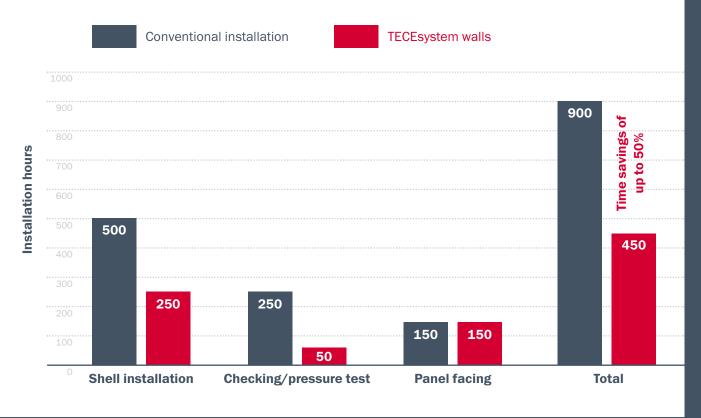


| 17

Installed without delay – to deadline: Complete shafts, complete wall modules

Clearly reduced building times, calculation security and simplified coordination of the works: That is the recipe for the success of the industrially prefabricated wall modules and sanitary shafts by TECE. After measuring out, the pre-wall installations are planned using computer support and then prefabricated by TECE. The pre-wall solutions are – complete with piping – delivered ready to connect. For one thing this saves time, for another the product composition is technically perfect and constructed to standard – with a guarantee. An ideal solution for the rapid, cost-certain and inexpensive renovation of larger buildings. And a concept that emphasises that TECE understands the housing industry.

Time saving when using industrially prefabricated TECE wall modules for 50 housing units



Industrially prefabricated wall modules accelerate the building process through optimised shell installation and ensure high-quality installation.



The entire sanitary technology for the renovation of an apartment block: Above, in the production hall, below, unloading on site.

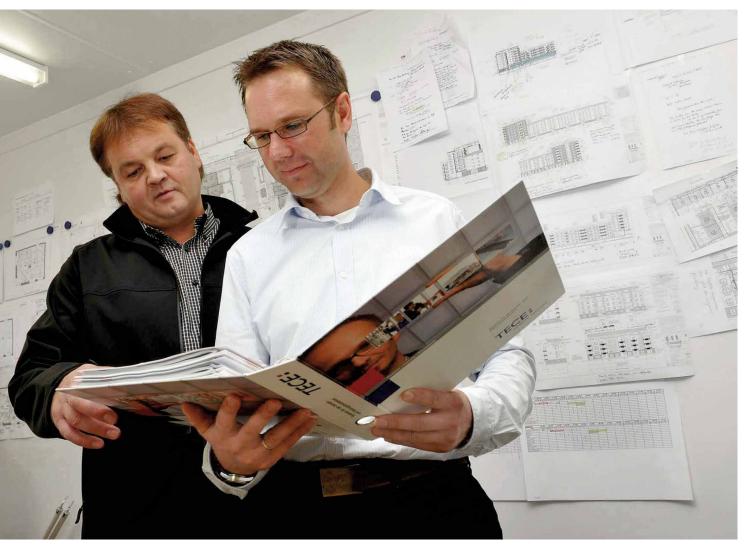
ME

TAT

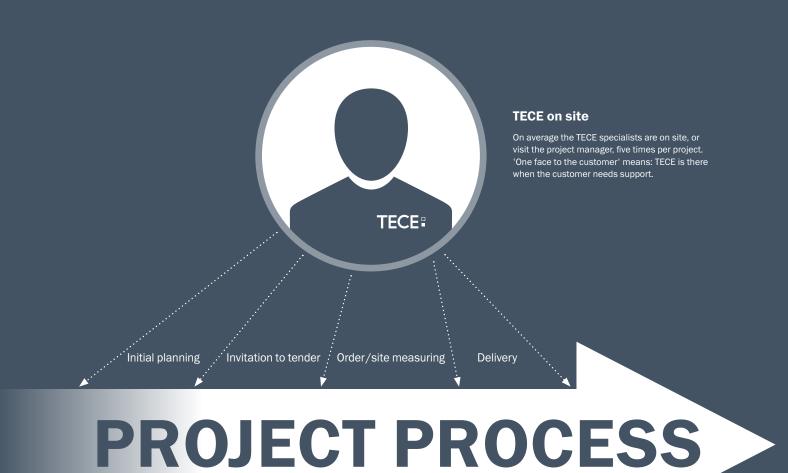
ISK.

Service is: We are there, when you need us

At TECE service means that the building client can be sure that specialists are available when they are needed. TECE specialists visit the client and his building site regularly. For the client this means: A well-informed contact person, a coordinated system, a binding delivery date, and a fixed price for a product that will be delivered to the site in certified quality and ready for installation. And if an issue should arise sometime – we will be there when you need us.



Our man on site: When the TECE building specialist is needed, he is there at your side with advice and support.



1) Initial planning phase: The project management calculates the requirements on the basis of the floor plans and an initial consultation. A piping calculation is done at this stage already. The processing and a first offer are produced in the short term for orientation purposes.

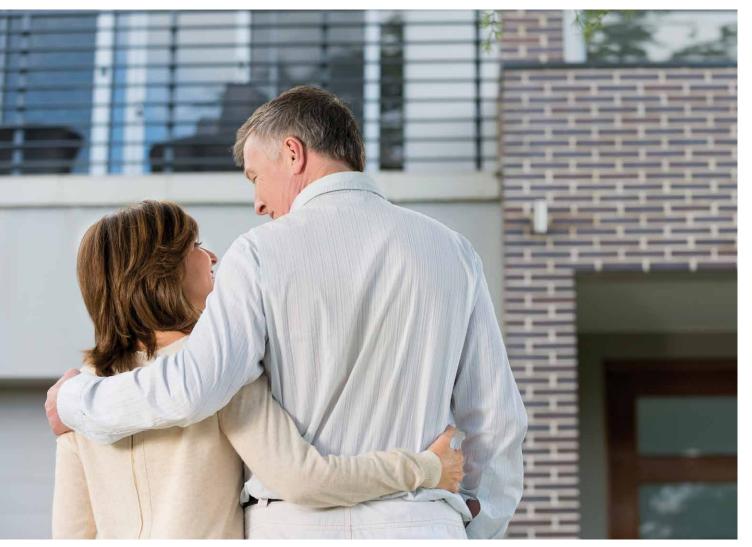
Discussion meeting: The offer is discussed in detail. The scope of supply is adjusted according to requirements. On this basis the offer based on requirements is made, with a fixed price and deadline guarantee.

-) **Order:** TECE gets the order.
-) **Measuring the site:** A TECE application technology specialist calculates the actual dimensions. In the process he takes into account all details, right down to the tiled areas. On the basis of drawings the order is released for production.
- (5) **Production/delivery:** Production of all the building parts takes place at short notice. It is possible to include special water meters or ventilators. TECE manages the container logistics: Delivery to the site according to the construction schedule.

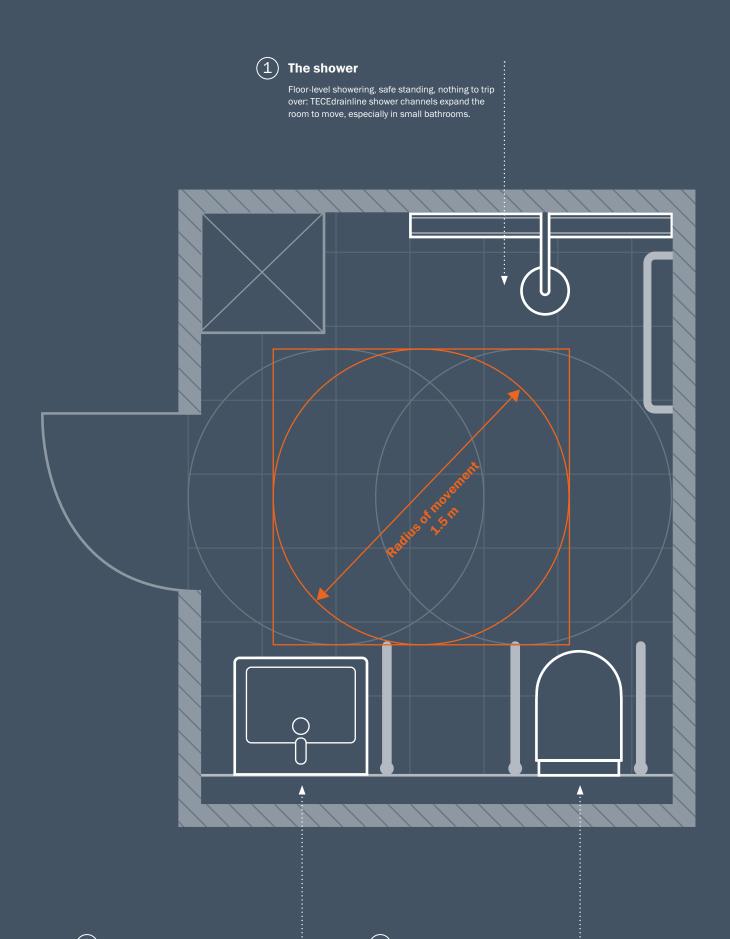
6 **Instruction on site:** First installations are always supported by the application technicians. The craftsmen are instructed in the application.

We are all getting older – especially your tenants

When it is question of accommodation for older tenants, then barrier-free living space is required. This question is answered primarily in the bathroom: with the toilet, the shower and the washstand. For all three of these neuralgic zones TECE has a solution to offer, which can be optimally used for a package to suit different generations. What is special is that: You do not see the barrier-free character of these solutions – every user experiences them as comfort. Whether shower channel, retrofitting folding support handrails, or toilet and washstand with individual installation heights – they all ensure that tenants can grow old safely in their home. And what is always true: The technology in the wall and floor can be flexibly retrofitted or changed according to requirements.



People and tenants are getting older: The TECE barrier-free concept reflects this development and thus makes the marketing of a rented building much easier.



2 The washstand

Pre-wall elements from TECE allow flexible height installation of the washstand for wheelchair users and the positioning of additional handrails.

3 The toilet

Here TECE offers solutions for easy retrofitting of folding support handrails, for height adjustment, and the option of connection of shower toilets.



Sound insulation and fire protection – Rent out on the safe side

Fire protection

Through fire protection housing companies bear a great responsibility for the safety of their tenants. Housing technology installations with unprotected wall and floor passages are risk factors in case of fire incidents: They supply the fire with air, let flames spread and deadly smoke travel through. For this reason TECE has developed special fire protection components: TECE products fulfil the requirements of fire protection by simple means.

Sound insulation

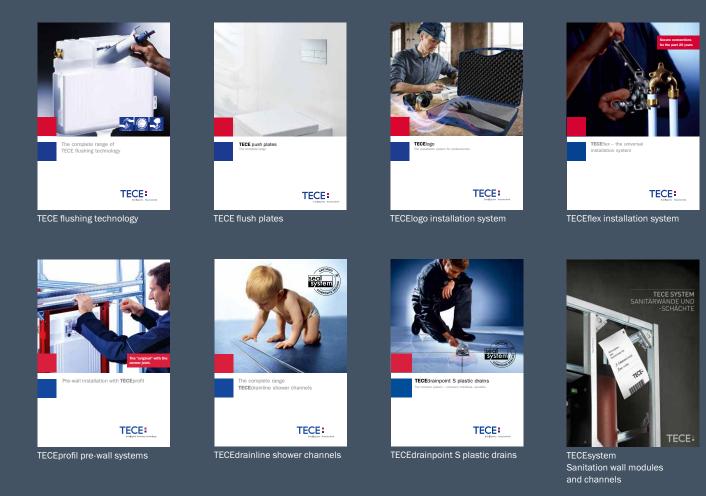
Sound insulation means quality of life – avoids stress and recourse claims. TECE offers sound insulation sets for pre-wall installations, toilet flushing technology, floor drains, and shower channels. Current measurements at the Fraunhofer Institute in Stuttgart confirm the very good sound insulation properties of the TECEprofil complete pre-wall system. Accordingly, the system fulfils the strict requirements of DIN 4109 and VDI 4100 – the new sound-op-timised universal filling valve even sets new standards in terms of quiet filling of toilet cisterns. Additionally TECE has for the first time commissioned sound measurements in front of light gypsum walls, such as those often used for partition walls in house construction. Here too, the test reports confirm the excellent sound insulation values.



Endurance tests with fire and sound: The Materials Testing Institute for the Building Industry (MPA) in Braunschweig (left page) has successfully tested the TECEprofil pre-wall system. The passages through different floors can also be easily and effectively secured (bottom left). Following intensive testing in the acoustics laboratory, the Fraunhofer Institute for Building Physics in Stuttgart (right) confirmed the high quality of TECE system solutions for different wall constructions.

Contact us

Request further information material or download from www.tece.com



TECE GmbH International Business Phone +49 (0) 2572/928 999 international-business@tece.de www.tece.com

