



Planning aid for changing rooms according to ASR



Locker Room Planning Aid according to ASR

Locker rooms enable employees to change and store clothing safely and hygienically. For setting up and operating locker rooms, there are special workplace guidelines according to ASR 34.

These guidelines must be strictly observed. Our planning aid for locker rooms according to ASR gives you an overview as well as assistance. In addition, we show example arrangements of lockers and benches.

Our on-site consultants are available to you to provide advice:

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IN 6 STEPS TO AN OPTIMIZED LOCKER ROOM

1 DETERMINATION OF THE REQUIRED NUMBER OF LOCKERS

The number of employees who are assigned a locker in the room also determines the width of the traffic areas.

2 DETERMINATION OF THE USABLE AREA

After deducting the traffic areas, the areas usable for the placement of lockers result.

3 DETERMINATION OF THE LOCKER ARRANGEMENT IN THE ROOM

Through an optimal arrangement of lockers in the room, the usable area can be utilized to its maximum.

4 DEFINITION OF THE COMPARTMENT SIZE AND LAYOUT

Based on the required quantity and individual requirements, the compartment size and layout of the lockers are determined.

5 PREPARATION OF YOUR KEMMLIT OFFER

Based on your individual requirements, we will prepare a prompt offer for you.

6 MEASUREMENT AND INSTALLATION

After measurement and creation of a scaled drawing, professional installation is carried out by one of our 80 experienced installation teams.



Well-designed locker rooms ensure demonstrably for satisfied and motivated employees. Let us inspire you too!

Christoph Glaunsinger,
Key Account Sales Manager

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Fundamentals of the Workplace Guideline

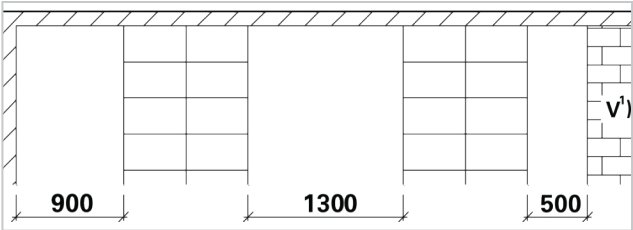
Changing rooms enable employees to store clothing safely and hygienically. When designing, attention must be paid to potential hazards in changing rooms could arise, as well as measures to prevent them. Key points at a glance:

Equipment of Changing Rooms

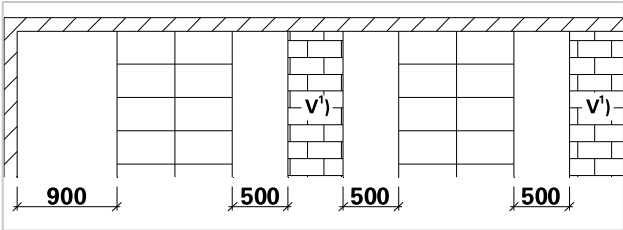
- For storing clothing, the following must be used: **lockable lockers**, clothes lifts, or hook or hanger racks with or without a drop-off table (drop-off cloakroom, i.e., supervised storage).
- If lockable **lockers are provided**, a minimum dimension of 300 mm x 500 mm x 1800 mm (W x D x H) must be maintained.
- Black-and-White Systems:**
If employees are exposed to infectious, toxic, harmful, corrosive, irritating, or strongly odor-causing substances or heavy soiling, a separate storage facility for work clothing (Black) and street clothing (White) must be available. If the storage facility is spatially separated, it is advisable to connect the two parts of the black-and-white system via washrooms (see § 36 ArbStättV). If lockable**lockers are used**, they should be divided along the longitudinal axis in such a way that a separate storage of work and street clothing is possible. The lockers must be **at least 600 mm wide, 500mm deep, and 1800 mm high** and include a shelf. The two compartments per employee required for black-and-white systems do not need to be divided along the longitudinal axis and only need to be 300 mm wide. A division along the longitudinal axis is also not required if the work clothing is not more than moderately soiled.
- Lockers must be designed to allow for continuous ventilation.**
- For **every four locker units, at least one seating option should** be available.
- For clothes lifts, the distances between the rows of rollers and the distances within the rows of rollers for black-and-white systems must be at least 400 mm, and for simultaneous storage of work and street clothing, at least 500 mm. The distance between the floor and the roller axis must be at least 5 m.
- Changing rooms must **be equipped with** waste bins.
- Changing rooms must be **equipped** with mirrors.
- In workplaces with very heavily soiling activities, a shoe cleaning system must be available.

Dimensioning and Layout of Changing Rooms

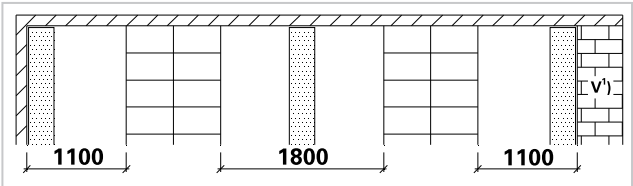
Lockers without Bench | Variant 1



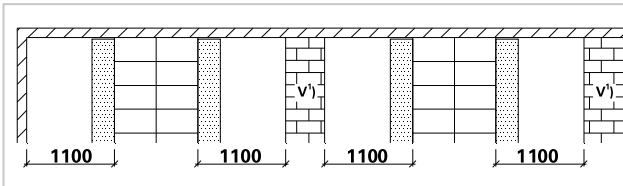
Lockers without Bench | Variant 2



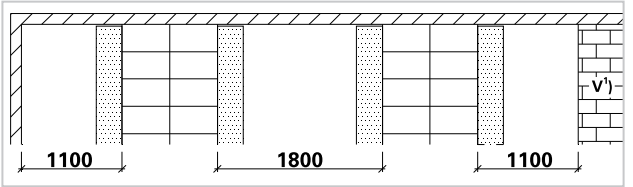
Lockers with Bench | Variant 1



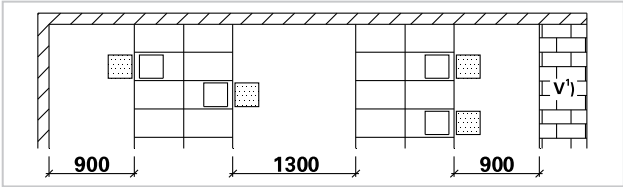
Lockers with Bench | Variant 2



Lockers with Bench | Variant 3



Lockers with Retractable Stool

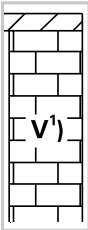


Dimensioning of Traffic Routes

Traffic routes are for pedestrian or operational vehicle traffic designated areas. These include, in particular, corridors and aisles.

Number of Users Clear Width in m Traffic Routes Used as Escape Routes	
up to 5 users	0,90*
up to 20 users	1,00
up to 200 users 1,20	
up to 300 users 1,80	
up to 400 users 2,40	
When determining the number of users, visitors, customers, etc., must be included	

Traffic routes must be clearly laid out and should run as straight as possible.



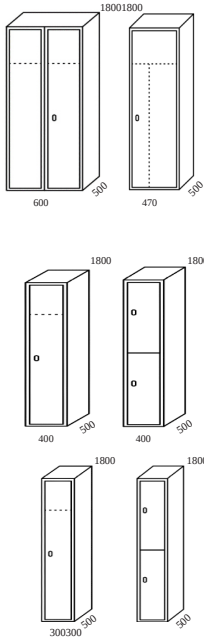
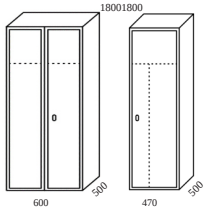
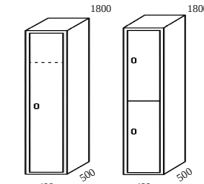
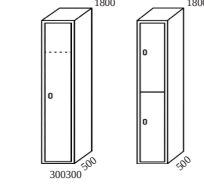
The minimum width of traffic routes is derived from the widths of escape routes of the Workplace Guideline (these are based on the number of people in the catchment area).

v1 Traffic Routes

*) In buildings erected by 30.09.2022, or for which building permit applications were submitted by this date, traffic routes for up to 5 people may be set up with a clear minimum width of 0.875m, or operated until the respective areas of the workplaces are significantly expanded, or rebuilt, or an enlargement becomes necessary according to §3a paragraph 2 of the Workplace Ordinance.

Determining Space Requirements for Lockers

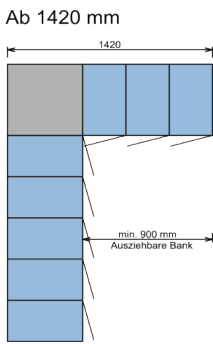
The following table shows the respective space requirements for the locker variants. In addition to the pure footprint, this also includes the movement areas required in front of the cabinet according to ASR. This results in the maximum number of compartments that can be accommodated in a 100 m2 sample room (without considering traffic areas).

	Variant / Width	Space requirement m2 per compartment incl. movement area	Max. number of compartments on 100m2 without traffic routes
	Black/White 600 mm with integrated bench	0.85	117
	Black/White 600 mm with pull-out bench	0.7	142
	1-part with partition 470 mm with integrated bench	0.66	151
	1-part with partition 470 mm with pull-out bench	0.54	185
	1-part 400 mm with integrated bench	0.56	178
	1-part 400 mm with pull-out bench	0.46	217
	2-part 400 mm with freestanding bench	0.28	356
	1-part 300 mm with integrated bench	0.43	232
	1-part 300 mm with pull-out bench	0.35	285
	2-part 300 mm with freestanding bench	0.215	464

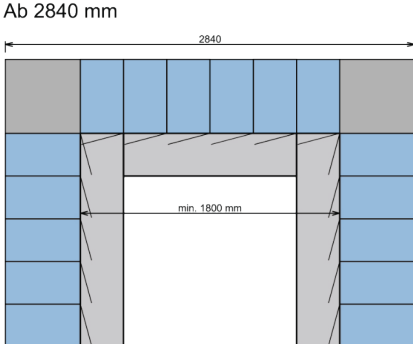
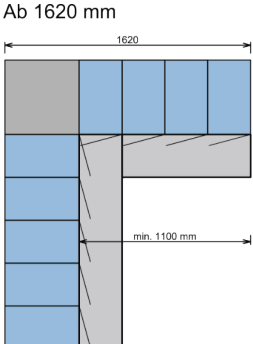
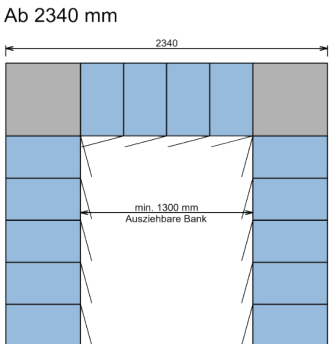
Optimal Space Utilization

The following arrangement of lockers in an L-shape or even U-shape optimally utilizes the floor plan and allows for a maximum number of employee lockers.

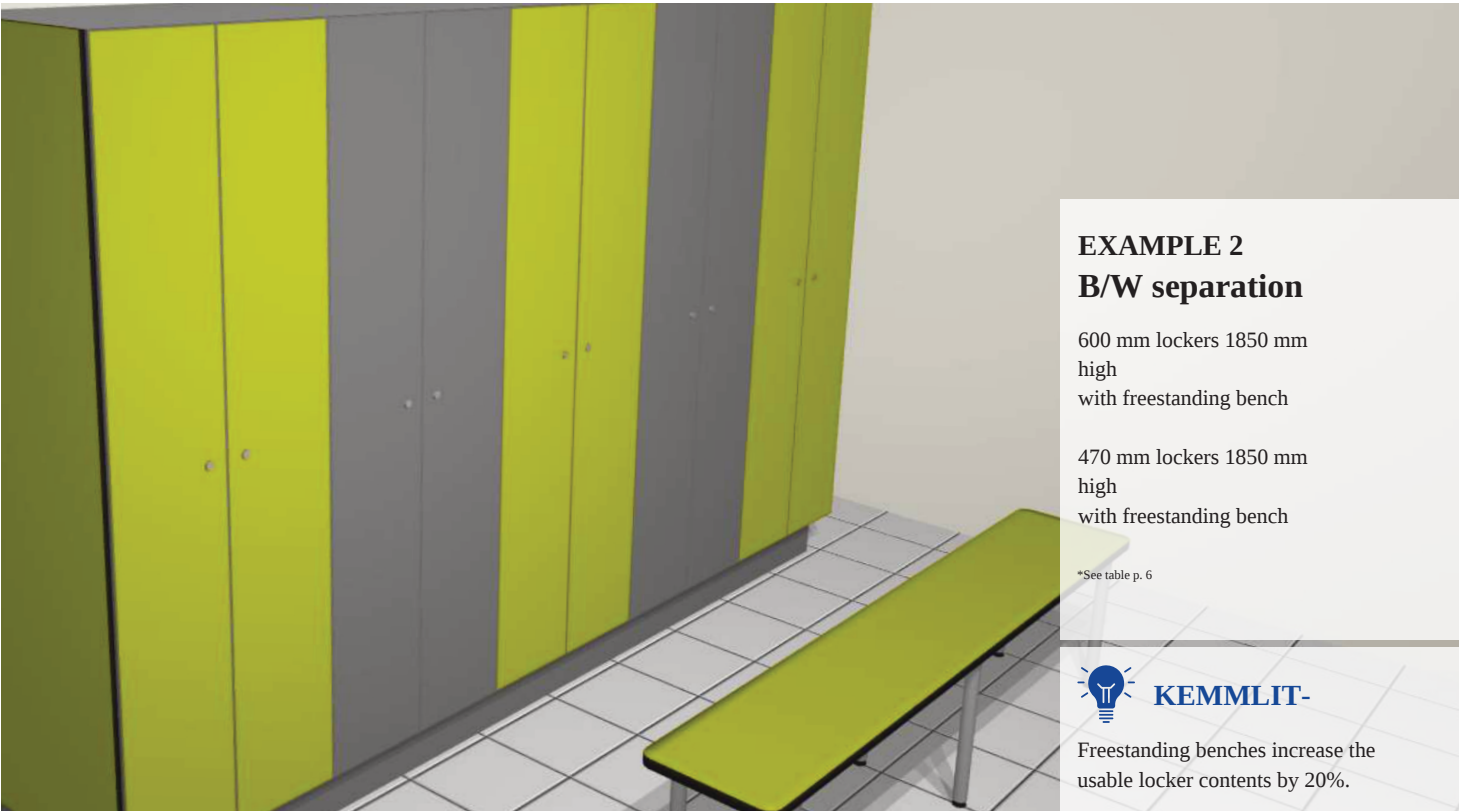
With pull-out or
without bench



With integrated or
freestanding bench



Room Layout Examples



Room Layout Examples



EXAMPLE 3

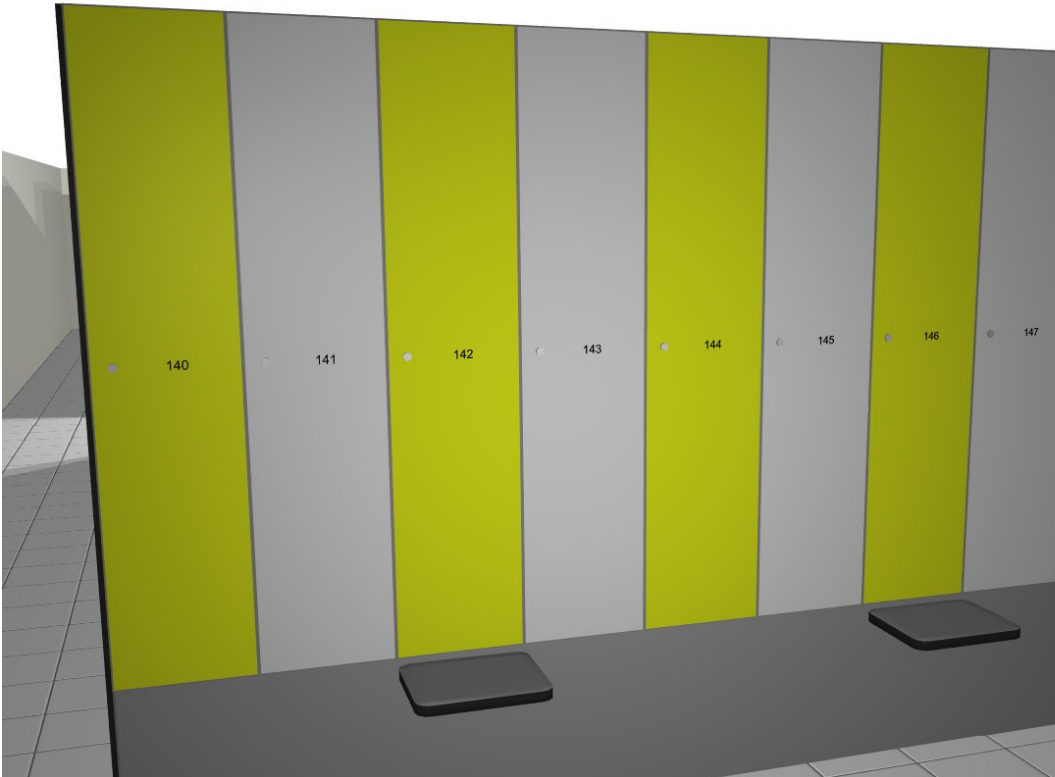
400 series lockers, 2-part, 1850 mm high with freestanding bench
356 employee lockers*

300 series lockers, 2-part, 1850 mm high with freestanding bench
464 employee lockers*

*According to table p. 6

**KEMMLIT-**

Lockers with freestanding benches can be, due to their higher volume, easily horizontally divided.



EXAMPLE 5

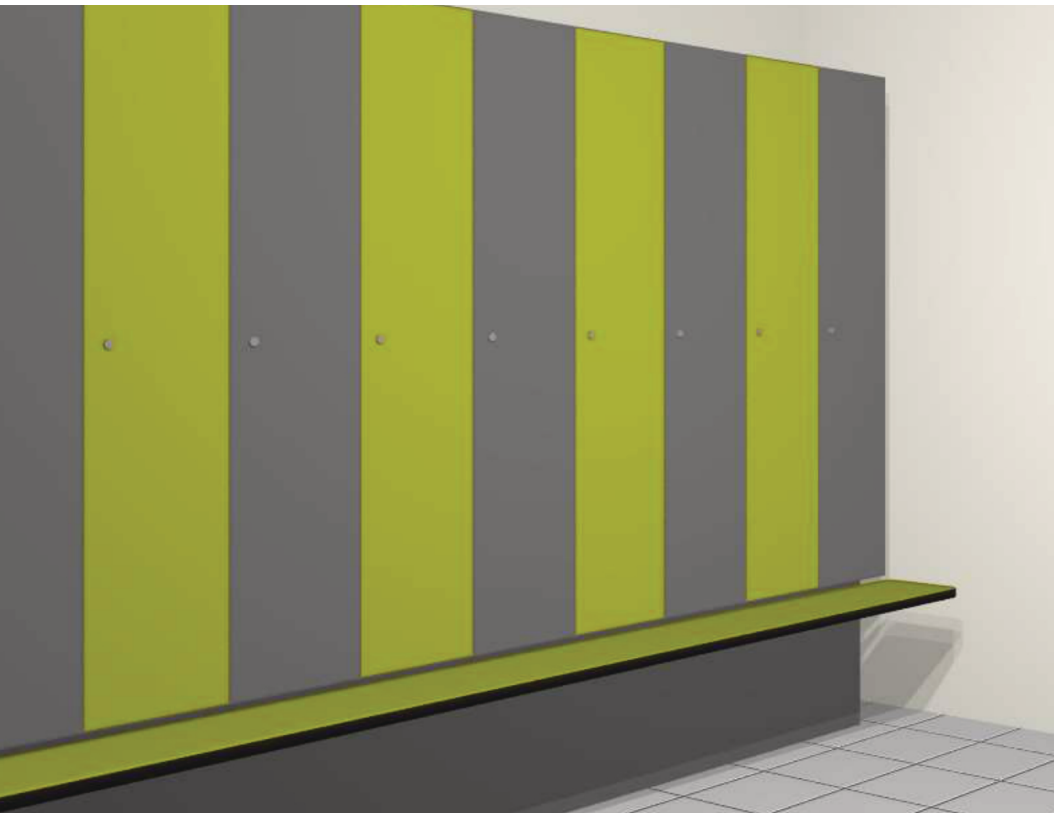
400 series lockers, 1-part, 1540 mm high with pull-out bench
285 employee lockers*

300 series lockers, 1-part, 1540 mm high with pull-out bench
285 employee lockers*

*According to table p. 6

**KEMMLIT-**

Pull-out benches reduce the space requirement, so that 22% more lockers can be accommodated in the room.



EXAMPLE 4

400 series lockers, 1-part, 1540 mm high with front-mounted bench
178 employee lockers*

300 series lockers, 1-part, 1540 mm high with front-mounted bench
232 employee lockers*

*According to table p. 6

**KEMMLIT-**

Front-mounted benches with concealed base frame allow for efficient cleaning.

Offer for your individual room situation



Based on the initial plans, we will gladly prepare for you a customized offer at short notice with various solution options.



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Sales Manager thomas.bopp@kemmlit.de



Supplementary Excerpts from ASR § 34

6 Ventilation of Changing Rooms

6.1 Natural Ventilation

For natural ventilation, the size of the ventilation opening depends on the room size and the type of ventilation:

6.2 Single-sided Window Ventilation

For single-sided window ventilation, the ventilation opening must be at least 0.02 m² per square meter of room size. This means that in a 100 m² changing room with single-sided ventilation, the ventilation opening (e.g., window) must have a size of at least 2 m².

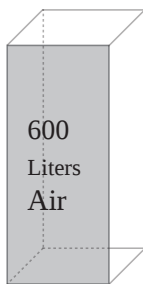
6.3 Cross Ventilation

For cross ventilation of the changing room, i.e., if ventilation openings are present in opposing exterior walls or in a roof area, these must each have a ventilation opening for the supply and exhaust air cross-section of at least 0.006 m² per square meter of room size. This means that in a 100 m² changing room with cross ventilation, the opposing ventilation opening (e.g., window) must be at least 0.6 m² each.

6.4 Mechanical Ventilation

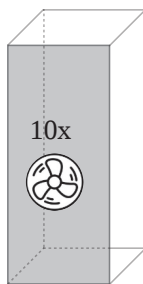
Ventilation systems in changing rooms must be designed to enable a four- to eight-fold air exchange per hour.

YOU SHOULD REMEMBER THESE THREE VALUES

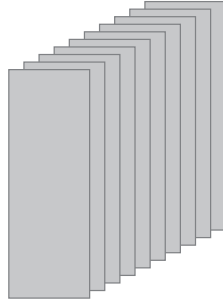


600 mm width
>0.6 m³

For every 100 mm width, a locker has approx. 100 liters, i.e., 0.1 m³ capacity.



10 air changes
> 6 m³/hr.



10 lockers per extraction
>60 m³/hr.

Through a DN100 extraction pipe, 60 m³/hr can be easily extracted at 2m/s.

Supplementary Excerpts from ASR § 34

8 Cleaning and Drying of Workwear

8.2 If drying of wet or damp workwear is not guaranteed with usual storage until the next start of work, the workwear must preferably be dried in a separate room if possible. The drying facilities must be designed so that the clothing is dry by the next start of work.





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