

Working conditions in the construction sector – heavy physical work persists despite technical progress

Employing around 2.5 million people and accounting for almost five per cent of overall gross value added in 2013, the construction industry is considered a key sector in Germany. For employees, work in construction professions is still characterised by high stresses. Compared to other sectors, therefore, the construction industry has to deal with a considerably higher number of accidents at work and occupational diseases. Many people working in construction are forced to give up their job as a result of illness before reaching retirement age. Under which conditions do employees in the construction sector work and what about their health status? This factsheet provides the answers.

Male domain of construction

Employees in the construction sector are made up of several occupational groups:

- building construction occupations (e.g. bricklayers, concrete builders)
- civil engineering occupations (e.g. road builders, track-layers)
- unskilled construction workers
- finishing occupations (e.g. tilers, roofers)

Today, the construction industry is still a male domain. The total of 20,036 respondents in the BIBB/BAuA 2012 Employment Survey included 427 persons employed in the above-mentioned professions; of these, only five were women. To compare working conditions and health, therefore, the 422 men in construction and the 10,605 men in other occupations were considered.

Heavy physical work in an unfavourable environment

The BIBB/BAuA 2012 Employment Survey is interested in finding out, among other things, how often (frequently, sometimes, rarely, never) a physical working condition occurs. The chart below shows how many people employed in construction professions or other occupations give the answer “frequently”.

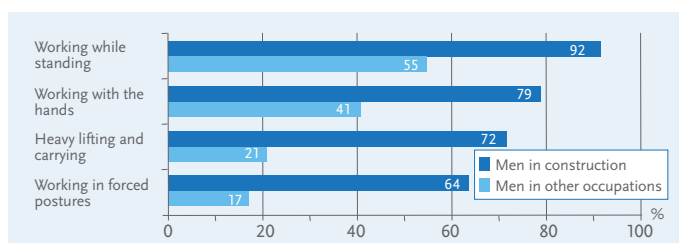


Fig. 1: Percentage of employed persons that are frequently affected by these working conditions

Activities in construction still necessitate heavy physical work. For example, in terms of physical working conditions for people employed in those occupations, the top of the list is working while standing (92%), followed by using the hands to perform work requiring great dexterity, fast sequences of movements or greater strength (79%). In the construction, 72% of employees have to lift and carry heavy loads. Almost two thirds (64%) state that they frequently work in forced postures, i.e. in a bent, squatting, kneeling or lying posture. Especially the last two physical conditions are reported considerably less often in other occupations (21% and 17%).

However, construction professions are not characterised only by high physical stresses. In addition, a series of unfavourable environmental conditions occur significantly more often in construction than in other occupations. The chart below shows how frequently environmental conditions occur in construction and in other occupations respectively.

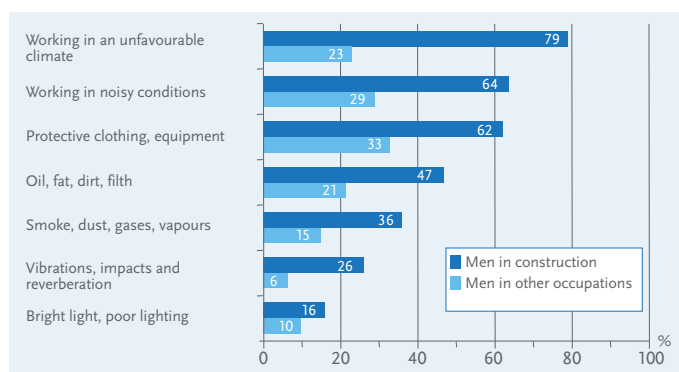


Fig. 2: Percentage of employed persons that are frequently affected by these environmental conditions

The influence of weather is a typical feature of construction. Accordingly, with respect to working conditions, in construction working in an unfavourable climate, i.e. in cold, heat, wetness,

humidity or draught, is most frequently reported (79%). In second place, persons employed in these occupations report frequently being exposed to noise at work (64%). Almost half (47%) have to work with oil, fat, dirt and filth, and over a quarter (26%) work with strong vibrations.

The psyche also plays a role

Working in construction is associated with specific mental demands. Persons employed in these occupations are more frequently affected by restricted scope for action and monotonous work sequences. This comes in the form of detailed specifications of how to carry out work, targets (e.g. relating to output) and constantly recurring work processes. In addition, when compared with other employed persons, this group more often states that they work at the limits of their capability (29% vs. 16%). They tend to report working quickly, as well as deadline pressure and pressure to perform, but are less frequently affected by multitasking (several tasks at once) and disturbances/interruptions. Furthermore, in building occupations, it is less often necessary to improve processes and perform new tasks.

Heavy physical work is not without consequences

The chart below illustrates the health situation of people employed in construction. The respondents were asked about psychosomatic and musculoskeletal complaints that occurred in the last 12 months during work or on working days. Examples of musculoskeletal complaints include pain in the knees and backache/lumbago, and examples of psychosomatic complaints include physical exhaustion and general fatigue.

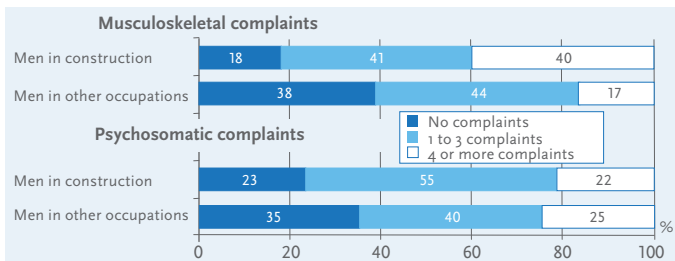


Fig. 3: Percentage of employed persons indicating health disturbances

It is shown that 40% of employees in construction report four or more musculoskeletal complaints, whereas this number is just 17% in the comparison group. In employees who report no musculoskeletal complaints, this ratio is approximately reversed (construction: 18%; other occupations: 38%). Differences can also be observed between the two groups with respect to psychosomatic complaints. For example, 55% of employees

in construction report one to three psychosomatic complaints (other occupations: 40%). Only 23% of respondents working in construction are complaint-free in this regard, compared to 35% in the comparison group.

Summary: reducing physical stresses overall

High physical stresses, unfavourable environmental conditions, working at the limits of capability, and monotony: work in construction is frequently associated with demanding working conditions. These conditions can result in health disturbances, especially in older employees. If multiple musculoskeletal complaints occur at the same time in conjunction with cardiovascular diseases, this frequently means that affected persons can no longer carry out their work in the construction industry. To prevent the situation from ever reaching this stage, measures such as health-promoting, ergonomic work design and adherence to codes of conduct can prevent health disturbances from occurring. Further information can be found on this in Factsheet 2 (www.baua.de/dok/717904).

In times of demographic change, the construction industry faces additional challenges in the form of ageing workforces and an impending shortage of skilled workers. Workplaces with reduced physical stresses can ensure that older people can continue to perform their work. In the interests of working conditions that meet age-related needs, it is also important to ensure constant preventive health care that already raises awareness of safe and healthy work in younger people in building occupations.

Would you like to find out more about this?

Comprehensive information and numerous useful tips for ergonomic work design in practice are available from the German Social Accident Insurance institution for the construction industry (BG BAU): www.bgbau.de/ergonomie-bau

The prevention campaign “Denk an mich. Dein Rücken” [Think of me. Your back] aims to minimise work-related back strain in all trades: www.deinruecken.de

The “Offensive Gutes Bauen” [Good Building Campaign] is a nationwide network of all construction industry partners and is aimed at promoting a new level of construction quality in Germany: www.offensive-gutes-bauen.de

The “Branchenschwerpunkt Bauarbeiten und Baustellen” [Industry focus on construction work and construction sites, in German] on the BAuA’s website provides comprehensive information on this topic: www.baua.de/baustellen

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