



# SHARE

Social Housing Action to  
Reduce Energy Consumption



## Case Study 18

### Condensation and mould prevention in Remscheid



#### Training on Heating / Ventilation / Condensation in tenants' flats

At the SHARE forum meetings and information events for tenants in Remscheid it became apparent that the topics of heating, ventilation and condensation were amongst those that were top of the list of tenants' interest.

The Forum and Steering Group decided therefore to launch a programme of home visits. These were carried out by the city's health department, an independent architect, a building officer of the relevant housing association and the energy consultancy B.&S.U.



SHARE is an Intelligent Energy Europe Project working in eight European areas to develop energy efficiency and low carbon technologies in social housing. For more information about the SHARE project and for other case studies see the project website:

[www.socialhousingaction.com](http://www.socialhousingaction.com)

Consultations took approximately one hour per visit and were carried out as follows:

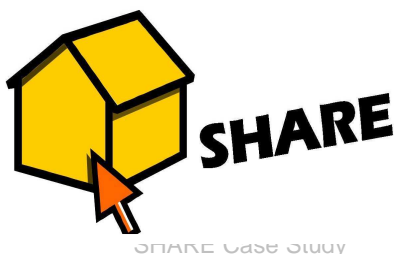
- Tenants explained their main concerns.
- The flat was inspected for condensation problems that were visible or could be detected by smell
- With the help of wall condensation hygrometers the flat was examined for condensation problems that were invisible.
- Results were analysed for potential construction problems in the building envelope and for possible issues regarding user behaviour.
- Tenants were advised on heating and ventilation by the health department representative and the architect.
- When applicable, the building officer from the housing association noted down construction problems to be dealt with.
- Tenants were asked if they have further questions and whether they found the advice useful



The evaluation shows that 100% of the consulted tenants found the advice useful. Up to **43 households** profited from the personal and independent consultations for condensation and mould prevention in the first phase, and the programme will be continued.

The following aspects were noted as important to tenants:

- Objectivity and independence of advice
- Landlord staff did not intervene but noted down problems to be remedied immediately



## Prevention of mould

Water vapour (moisture) is absorbed and held in the air up to a limit. Warm air can hold more moisture than cold air. If air, which is saturated with moisture, cools down (such as at a cold wall) water will condense on the cold surface.

Damp walls in connection with organic materials like wallpaper, glue and fabric, are a perfect culture medium for mould. If there are good conditions for mould, black or white-grey spots are formed. Mould reproduces through small spores, which are dispersed in the air and can spread through a home. Since mould spores can cause health problems, mould should be removed as quickly as possible.

Mould on walls will only grow if there is enough moisture over an extended period.

A lot of people are oblivious to the fact that there is a high production of water vapour in any household, which is absorbed by the air.

Moisture per day	Volume
Person	1,0 – 1,5 litre
Cooking	0,5 – 1,5 litre
Shower, Bathing p.P.	0,5 – 1,0 litre
Laundry (4,5 kilo)	
spun-dry	1,0 – 1,5 litre
dripping wet	2,0 – 3,5 litre
Indoor plants	0,5 – 1,0 litre

Fully opening the window regularly for 3-5 minutes, will help to drive the moisture out of the room. Especially in winter, tilted windows just contribute to higher fuel bills, but don't ensure effective ventilation!

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