

## Insulation carries risk of lethal fires

<http://www.dr.dk/Nyheder/Penge/2010/12/10/151236.htm> (News/Money)

If the Danish Enterprise and Construction Authority have their way, the use of foam insulation for cladding external walls on detached houses will be permitted from the New Year onwards.

“We believe the solution, which involves packing foam insulation in render, is a sound one”, says Charlotte Michelsen, a senior consultant at the Danish Enterprise and Construction Authority.

But fire fighters think that the new application of insulation is madness, because of the danger of holes in the render.

“If there is a sudden fire on the outside of a building and it spreads to the roof, the fire would spread instantly, increasing the risk for firemen and anyone in the building”, warns Tommy Kjær, Vice Chairman of the Fire Fighters’ Association.

### Poisonous fumes, suffocating smoke

Foam insulation is lightweight, easy to work with and cheap. But it is also highly flammable. Chief engineer at Tryg Forsikring (insurance company), Erik Isbrand Møller, thinks that for this reason foam insulation simply does not belong in a domestic building where people sleep.

“Foam products give off a particularly noxious smoke. Moreover, once it catches fire, the house will burn down completely”, he says.

But the Enterprise and Construction Authority believes the proposed application, encapsulating foam in 6 millimetres of render, is a good solution.

“Amongst other things, this solution is used in our neighbouring countries, Norway and Sweden and there have not been problems there”, says senior consultant Michelsen.

### Swedish tested

She emphasises that the application as described has passed tests in Sweden. But Erik Isbrand Møller of Tryg Forsikring thinks that this is not good enough.

“The method was developed 20 years ago. There have been attempts to have the application recognised as a European standard. These have failed: the test is not good enough”, he says.

The new guidelines have been submitted to various parties for consultation. Most have approved the change, according to Michelsen of the Danish Enterprise and Construction Agency.

The new rules enter into effect from the New Year.



## Press Release

### **Foam insulation increases the risk of fire spreading and reduces the safety of firefighters attending incidents**

*In a new guidance to the building regulations, the Danish Enterprise and Construction Authority is proposing to permit plastic foam insulation for ordinary single-family houses. However, this proposal is now under criticism from many sides – including the Danish Firefighters' Union, Brandfolkenes Organisation – as foam insulation both increases the risk of fire and actually makes fires more dangerous when they do occur.*

Owners of single-family houses are to be given greater access to use foam instead of stone wool or fibre-glass when insulating the external walls of their home, according to proposed new building regulations from the Danish Enterprise and Construction Authority. The proposal was recently sent out for consultation and is being criticised from many sides. Amongst those airing criticism is Brandfolkenes Organisation (the Danish Firefighters' Union), which believes that plastic foam insulation increases the risk of fire whilst also increasing the risk of the fire spreading.

“There are already many risks involved in entering a burning building. Now they want to further pave the way for the use of external foam insulation, which represents a fire hazard. In my view, this is completely the wrong route to take. On the contrary, this material should be completely banned for this kind of use,” comments Tommy Kjær, Vice-Chair of Brandfolkenes Organisation.

“We are well aware that the Enterprise and Construction Authority says that the foam must be covered by a thin layer of render and that it must also comply with some Swedish regulations. However, these regulations in question have been criticised and cannot, for instance, be approved as a standard within the EU. For us firefighters, the bottom line is that foam insulation burns extremely easily and gives off a particularly toxic smoke. Therefore it represents a hazard for both residents and firefighters. The new regulations, quite simply, represent a dilution of safety and we fear more severe fire incidents,” he said.

#### **Fires can spread quickly**

Earlier this week, the Danish Enterprise and Construction Authority explained to the Danish Broadcasting Company's website dr.dk that, as long as the foam insulation is covered by six millimetres of render, the Authority regards it as a valid method of insulation.

The Danish Firefighters' Union, meanwhile, fears the consequences of any cracks or holes that may occur in the render. Or what may happen if the render coating is not installed *to the very letter* of the regulations.

“As long as everything is done in accordance with the regulations and the plans, the risk is obviously smaller, but you have to be aware that *mishaps* do happen – and that mishap may simply involve someone playing with a ball against the wall or the render layer having been incorrectly finished – or the render may be damaged or *get damaged* during a fire. In such circumstances, the house can catch ablaze from the outside, from which point the fire can spread to the roof and then we have a much more fierce fire to deal with. That increases the risks for firefighters in general and for everyone within the building,” Kjær explains.

#### **The wrong way to go**

“We are taking this very seriously and if we cannot prevent it, we will have to find a solution. That *could* mean that we would be unable to enter a building and extinguish fires from within if we become aware that a building was insulated with foam. Obviously that could have very serious consequences in the worst case scenario. But we need to look into this, and we would still need to extinguish the fires one way or the other, perhaps through making greater use of *safety teams* or by extinguishing from outside the building. The question then is just how serious the damages would be,” Kjær continues.

The firefighters highlight a recent fire in the French city of Dijon where plastic foam insulation was one of the causes of the particular ferocity of the fire, according to media reports. The fire cost eight people their lives. Brandfolkenes Organisation believes that paving the way for greater use of fire hazardous insulation materials is the wrong way to go. Fundamentally, the use of such materials as a building insulation should be abolished.

Caption: Greater use of foam insulation will increase the risk of fire and weaken the safety of firefighters, according to the Danish Firefighters' Union, Brandfolkenes Organisation.

*For further information in relation to this press release, please contact:*

# BRANDFOLKENES ORGANISATION



Brandfolkenes Organisation  
(the Danish Firefighters' Union)  
Vice-Chair  
Tommy Kjær  
Tel.: +45 40 579 507  
Email: [tbk507@mail.dk](mailto:tbk507@mail.dk)



## Pressemeddelelse

### **Isolering med skum øger risikoen for brandspredning, og svækker brandmandens sikkerhed under indsats.**

*I en ny vejledning for bygningsreglementet vil Erhvervs- og byggestyrelsen tillade at isolere almindelige enfamiliehuse med skum. Men forslaget møder kritik fra flere sider – bl.a. Brandfolkenes Organisation – for skumisolering øger både risikoen for brand, og gør branden farligere.*

Ejere af enfamiliehuse får nu øget mulighed for at kunne bruge skum i stedet for sten- eller glasuld, når de isolerer huset udvendigt. Sådan hedder det i forslaget til et nyt bygningsreglement fra Erhvervs- og byggestyrelsen.

Forslaget har netop været i høring, og møder kritik fra flere sider. Blandt andet fra Brandfolkenes Organisation, der mener, at skumisoleringen øger risikoen for brand, ligesom den øger risikoen for, at ilden spredes.

”Der er i forvejen mange faremomenter ved at trænge ind i en brændende bygning, og nu vil man yderligere åbne mulighederne for at bruge brandfarlig skumisolering uden på huse. Set med mine øjne er det den helt forkerte retning at gå, og i stedet burde materialet helt forbydes til den type anvendelse,” siger Tommy Kjær, næstformand i Brandfolkenes Organisation.

”Vi er klar over, at Erhvervs- og byggestyrelsen siger, at skummet skal pakkes ind i et tyndt lag puds – og i øvrigt overholde nogle svenske regler. Regler der ikke kan godkendes i EU som standard. Bundlinjen for os er imidlertid, at skumisolering brænder ekstremt nemt, og udvikler en særdeles giftig røg, og derfor udgør en fare for både beboere og brandfolk. De nye regler er simpelthen en svækkelse af sikkerheden, og vi frygter for større ildebrande,” siger han.

Erhvervs- og Byggestyrelsen har tidligere på ugen forklaret til dr.dk, at så længe skumisoleringen pakkes ind i seks millimeter puds, mener styrelsen, at løsningen er forsvarlig.

Men hos Brandfolkene frygter man hvad der sker, hvis der går hul i pudset, eller hvis pudsinddækningen ikke er lavet *helt* efter forskrifterne.

”Så længe alt går efter forskrifterne, og planerne er risikoen selvsagt mindre. Men der er jo noget, der hedder *uheld* – og et uheld kan for eksempel være, at der er nogen, der har spillet bold op af muren eller pudslaget ikke er påført korrekt - eller at pudset på anden måde er beskadiget, eller *bliver* beskadiget under branden. I sådanne tilfælde vil der kunne gå ild i huset udefra, hvorefter ilden vil brede sig til taget, og derefter står vi med en langt voldsommere brand. Det øger generelt risikoen for brandmanden, og alt det der opholder sig i bygningen,” siger Tommy Kjær.



”Vi tager det her meget alvorligt, og hvis vi ikke kan undgå det, så må vi jo finde en løsning. Men det kan komme til at betyde, at vi ikke kan trænge ind i et hus og lave indvendig slukning, hvis vi ved, at det er isoleret med skum – og det kan jo i værste fald få meget alvorlige konsekvenser. Men vi må se på det, og vi skal nok få slukket brandene på den ene eller anden måde. Spørgsmålet er blot hvor store skaderne når at blive,” siger Tommy Kjær.

Brandfolkene henviser blandt andet til en brand for nyligt i Dijon, Frankrig, hvor netop skumisolering ifølge medierapporterne var med til at gøre branden meget voldsom. Det kostede otte mennesker livet.

Efter Brandfolkenes Organisations mening er det en forkert retning at gå, når der åbnes op for et udvidet brug af brandfarlige isoleringsmaterialer, der dybest set burde afskaffes til brug til bygningsisolering.

*Henvendelser vedrørende denne meddelelse kan ske til:*

Brandfolkenes Organisation  
Næstformand  
Tommy Kjær  
Tif.: 40 579 507  
E-mail: [tbk507@mail.dk](mailto:tbk507@mail.dk)