

Condensation Management in Private Homes INSPECTION FORM and ACTION PLAN NOTES

	<p>The use of mould cleaning products should only be considered as a reactive emergency measure and not as part of any cure. The number of cleaning cycles needs to be outlined in the action plan. A minimum of three is advised. Anti-fungicidal paints have a limited life span and need to be applied extremely carefully in order to be effective. These should not be applied by persons who have not been trained how to use these products. It may be necessary for persons who are carrying out cleaning operations to wear appropriate gloves and masks. Heavy amounts of mould should not be cleaned down with mild detergents or bleaches. Specifically designed mould cleansing products should be used and must be applied as directed. Generally speaking it is necessary to apply the product and allow some time to pass before wiping clean.</p>
1	<p>Occupation: Base the occupancy on 2 adults per bedroom. This is a scale of occupancy density. High means it will be very difficult for the occupants to manage the condensation and some compensatory controls will be needed such as extra ventilation or heating controls. The presence of children at a property significantly raises the risk of the presence of mould. All persons engaged on managing a property with children must be made aware of their presence.</p>
2	<p>If the occupant does not know the design temperature then they need to be told it is 21^{0C} in the day and 16 -18^{0C} at night. If they don't know leave a digital thermometer for them</p>
3	<p>If the occupant cannot programme the heating this needs to be demonstrated as an emergency. There are sometime videos on line that show how this can be done but a physical demonstration Lead and follow technique must be employed. The occupant must demonstrate they can activate the controls. NOT that they have been given instructions</p>
4	<p>If the heating is turned off manually this needs to be discussed and discouraged by explain that heat is best spent at the right time and preparing rooms ready for use is the most cost effective way to control mould. Leave a data logger to run for 2 weeks to analyse what temperatures are being achieved when.</p>
5	<p>Has the heating been reported as working? Is all of it working. Order its repair immediately as an emergency. If you are not the heating engineer write down the exact description of the heating system including controls and the number in each room and if they are below windows and if they are covered.</p>
6	<p>Is there a system programmer with the heating system. If not, this needs to be rectified quickly. A time scale must be put on this with a report back note on any job tickets and actively tracked.</p>
7	<p>If the system does not have radiator thermostats or means of independent control this will be difficult for families with more variances in sleep and occupation patterns to manage the temperature in each room meaning they might switch whole systems on and off. Providing independent control needs to be matched with occupancy volume and variance.</p>

8	The central room thermostat should be in the hall. If there is a roving thermostat people sometimes move these to the most occupied rooms in the belief this improves the controls. The best place for a thermostat is in the coldest room. The radiator in that room should not have a radiator stat. if the system does not have a room stat this should be flagged as no until it can be confirmed this is not a problem of the over all control of the system.
9	Record here the temperature the system is set to. If this is below the design temperatures then this must be flagged. If below 14 the tenant may be in fuel poverty and needs to be sign posted. Some tenants do not understand the purpose of the thermostat so this needs to be explained and recorded. The thermostat can be used to generally control the temperature, but programming is better. The use of the thermostat needs to be monitored over time to see the tenant is using it to best effect. Some tenants might have heard about turning the temperature down to save money but this should not be so low as to give a condensation risk. If a tenant is concerned about the heating costs then 18°C is the most reasonable base line IF that suits occupancy and the house is vented correctly. <u>Do not</u> give this out as generic advice.
10.	Record the actual temperature as either above 16 as this is considered to be the base line below which management becomes extremely difficult. Take the measurement in the worst affected room. If below 16 a data logger should be set up to monitor for two weeks and a thermostat given to the occupant.
11	Record the Relative humidity in the worst affected room at the time of inspection. If you are not familiar with relative humidity go to: you tube video by Everwonder about the world ' what is relative humidity'. This needs to be below 70% at any given time. If over 65% leave a data logger to record for 2 weeks and a digital Hygrometer in the property. Air at 30°C can hold roughly 30grams of water air at 10°C can only hold 10Grams
12	Pre pay meters are very problematic as pumps and control systems need power. If the electricity is off there is no heating. This can make it difficult to understand why condensation is occurring on a single visit if the house feels warm enough. Houses take a lot of energy to warm through from cold and this is not always felt by humans. It is therefore important that heating does not go off for so long as to chill the fabric of the walls. Fuel poverty is a big part of barriers to controlling condensation mould so help must be given to guide tenants to the right payment methods and assistance of support.
13 and 14	Check that any fan in the property is working. Is it switches on when a light is operated or when humidity changes. Produce an action plan for each room. Advise the tenant that doors must be closed when using bathrooms and kitchens and to close the door behind them when they leave if they have just cooked or bathed.
15 and 16	Flexible ducting significantly slows the passage of air down and is likely to make the fan ineffective. It is critical to report the exact details of the ducting. If flexible ducting is present then this should be converted too solid ductwork as soon as possible. Ducting runs should be no longer than two metres and as straight as possible and insulated. Ducting should not terminate in the roof space.

17	if there is an extract fan on the ceiling and it is likely that the ductwork rises vertically then this will need to be further investigated for condensation traps and effectiveness. It may be necessary to have a full fan test undertaken.
18 and 19	Fans should continue running after a light switch has been switched off to stabilise the room after it has been used. if the fan does not have any run on then this should be converted to a model that does. Fans are often isolated to stop fans operating at night. This is acceptable as long as the fans are turned back on. If there is any doubt as to how the fan has been operated then a data logger should be cited specifically in the room where the fan is located. Families that have difficulty heating properties often overcompensate with ventilation and therefore mechanical fans act as a automated back up to help stabilise humidity.
20	this row is the identifier for the action plan for a particular fan. For example an action plan for observation 19 in the kitchen would be labelled 19A this is so that people initiating repairs know which room is being referred to
21	Single glazing will exacerbate difficulties in controlling condensation meaning a tenant would need to control the systems with more accuracy and skill to prevent running water and mould growth around windows. There must be an action plan for replacement. Consideration must be given to suitable housing guidance in this regard.
22	The responsible occupant should be given a demonstration of the five second window opening rule for the autumn and winter months. Holding the window catch, open the window at arms length for a count of five then close and re seal. This needs to be undertaken every morning and evening and before rooms such as bathrooms and kitchens are used for bathing or cooking. This technique can be used frequently but no longer than 5 seconds. The occupant should be told that if they feel cold when they operate the window this is too long and they should close it. This should be physically demonstrated. Occupants should not be left with generic leaflets as proof of explanation.
23	the presence of trickle vents is very important in managing condensation and therefore care should be taken to identify if trickle vents or the trick or vent setting to PVC windows is available and that the occupant is advised as to the significance of them. These provide important background ventilation which helps prevent the build-up of moisture. These need to be open if the occupant is struggling to manage condensation mould. These in themselves will not prevent condensation they help to lower the risk. Occupants should continue to use the 5 second rule to maintain the correct level of ventilation. Humans often over ventilate to compensate for low temperatures.
24	Tumble dryers need to be inspected two ensure fat they are vented correctly. Condensing tumble dryers need to have a cut off system when the tray becomes full and noncondensing tumble dryers needs to be connected to the outside. If there is any doubt as to the effect the tumble dryer is having on the management of the condensation then a data logger needs to be left in the room where the tumble dryer is cited. Just because a tumble dryer may not be the responsibility of the landlord it is important to establish if this is correctly installed as it would not be possible to manage the levels of moisture generated these deposit into rooms. Action plans need to be agreed with the tenant and help given to install the appliance correctly.

	Placing tubes out a window risks losing heat in the winter and therefore a specifically detailed hole in the wall is preferable.
25 & 26	Doors help prevent the spread of moisture throughout property and can be critical in the management of condensation in smaller flats with high occupation rates. It is important that occupants understand that they need to keep doors closed when they are using or have just used high moisture generating rooms such as bathrooms and kitchens. Bedroom doors should also be kept shut until a window has been opened for five seconds before the occupant leaves the bedroom in the morning. if there are no doors to the kitchen and the bathroom this needs to be attended to. It may be necessary to introduce concertina type folding doors if there is limited space. Any damage to doors such as handles or catches needs to be repaired to the same level of urgency as other items on the action plan.
27	it should be noted here if the tenant is drying clothing inside the property. The assessor needs to be aware that many people dry clothing indoors in the winter time and that this in itself can be controlled. Tenants should be advised that clothing should not be placed directly over radiators. The best location to dry clothing is on a clothes horse in a small room such as a bathroom or kitchen with the door closed. In buildings of multi occupancy where bed sets the occupants should be encouraged to either use laundrettes or drying facilities if possible and to only dry clothing inside their rooms if they have been partly dried outside or on an additional spin in the washing machine. Jumpers and warmer clothing should be washed in smaller batches if possible. Hanging items on clothes hangers next to windows with trickle vents is the best coping strategy if no other option is available. Clothing should be dried outside as often as possible. This can be done in most weather conditions except rain. it is not necessary for the weather to be warm to be effective in drying clothing. The action plan should be in agreement with the tenant as to the best way to manage their washing and may require agreement of a number of the occupants as to where the best places in the house are to dry clothing. People living in multi occupancy houses will struggle the most with this particular issue. Some consideration to providing a dehumidifier in a room where clothing will be dried should be considered in high occupancy buildings.
28	Doors to bathrooms and kitchens should have a minimum of A 3 millimetre gap at the bottom to allow air to cross circulate. This allows fans to function adequately and is critical to stabilising the environment in the whole building. Doors can be reduced using a piece of equipment which means that doors do not have to be removed.
29	Cold spots around the house will create areas of extremely high risk of condensation. It is almost commonly found at the head of windows and doorways where lintels are sighted. This can only usually be detected using a thermal imaging camera. Depending on the level of detail required to assess the building for long term improvements this stage may not be necessary. If there is an obvious buildup of mould in these locations then an action plan to improve insulation in these areas should be considered this might include insulation wallpaper.