GUIDELINES FOR WINDOWS WITH ASBESTOS CONTAINING PUTTY

QMS-FS-GUI-20-017 Revision 0 – 13/09/2019

TABLE OF CONTENTS

Revision History and Approval

Rev.	Nature of changes	Approval	Date
A	Draft for QMS Implementation	Greg Newton	11/09/2019
B	Draft Updated	Greg Newton	12/09/2019
0	Approved	Greg Newton	13/09/2019

1. Purpose

This document was created to help the Australian National University (ANU) adopt a consistent approach for activities involving windows with asbestos containing putty at the ANU Acton Campus and other ANU properties. It is applicable to both window putty positively identified as an Asbestos Containing Material (ACM) and window putty presumed to be an ACM.

This document is to be read in conjunction with:

- The respective building Hazardous Material (HazMat) Report / Register.
- The current and document controlled version of ANU's Hazardous Materials Management Plan.
- ANU's ACM Labelling Guidelines Rev. 3 (Dated 20 December 2017).

2. General Information

Historically, asbestos was used to reinforce window putty for increased strength and improved fire resistance. Fire resistance was an especially desirable quality in window putty because it protects the surfaces they are applied to from heat damage. Increased strength allowed the putty to more securely adhere to the building materials and to better resist cracking and splitting.

The term 'putty' is used interchangeably with any mastics, sealants and caulking used to seal the perimeter of glass panes with the window frames and the perimeter of window frames with the surrounding building material (i.e. brick, concrete, metal, timber, etc.).

3. Risks associates with Asbestos Window Putty

ACM putty on windows present a negligible risk if it is not disturbed. The asbestos fibres are bound within the putty and will not become airborne. They will remain embedded in the putty even if it splits, cracks or if small pieces of putty break away. For this reason, ACM window putty is considered bonded and non-friable.

Activities involving little or no risk of asbestos exposure from ACM putty:

- Removing entire window casements.
- Transporting entire window casements.
- Cleaning window panes.
- Painting window putty.
- Performing visual checks.

Activities involving an increased risk of asbestos exposure from ACM putty:

- Knocking out panes of glass with a hammer.
- Removing window putty using a putty knife or chisel.
- Removing loose paint flakes from window putty with a plain cork block.
- Removing window putty using a heat-based process in which the putty is heated to around 70°C to soften it.

Activities involving a very high risk of asbestos exposure from ACM putty:

- Mechanically grounding out window putty or putty residue using high-speed abrasive power tools such as angle grinders, sanders or drills.
- Removing paint from window putty using high-speed abrasive power tools such as angle grinders, sanders or drills.

- Shredding whole windows or parts of windows.
- Removing window putty using milling machines, joint cutters or oscillating knives.
- Demolition of buildings with very large amounts of window putty. For this reason, removal of ACM window putty must occur prior to any building demolition.

4. Identifying Windows with ACM Putty

The final prohibition for asbestos in the workplace came into effect on 31 December 2003. As a result, windows manufactured after 2004 were not permitted to contain ACM putty. However, the building Hazardous Materials Register should always be consulted to determine if window putty contains asbestos.

If the age of a window is not able to be confirmed or if the window putty is not included in the building register, the putty should either be (a) tested to determine if it contains asbestos, or (b) presumed to contain asbestos. Putty tested and identified as containing asbestos or putty presumed to contain asbestos should only be removed by a licensed Asbestos Removalist.

5. Activities Involving Windows with Asbestos Putty

At ANU, there are several activities commonly undertaken involving windows regardless of whether or not they contain ACM window putty:

- Routine cleaning of windows.
- Periodic resealing/repainting of windows.
- Periodic replacing of windows.

5.1 Window Cleaning

In collaboration with the third-party contractors who are hired to undertake window cleaning activities, a Safe Work Method Statement (SWMS) should be developed for cleaning windows. It should ensure that current cleaning procedures are considered so that all risks, if present, can be identified and mitigated.

The SWMS document should include the following items:

1) Purpose of the activity and the standard to which it is to be performed.
2) Training and competency required to perform the activity (i.e. working at heights, asbestos awareness, first aid, on the job training, etc.).
3) Equipment used to complete the activity (i.e. ladder, PPE, cleaning solutions, squeegees, extension poles, cloths, etc.).
4) Safety considerations for all risks involved (i.e. working at heights, dropping tools from height, broken glass, hazardous office equipment/materials, ACM window putty, etc.).

   Note: If equipment other than soft squeegees, cleaning solutions and cloths come into contact with ACM window putty, the additional equipment should be assessed to determine if its use will increase the risk of disturbing the ACM window putty. Alternative methods need to be considered if the risk increases.

5) Steps involved in the current glass cleaning procedure. The following points should be added to the current procedure if they are not already present:

   a) Cleaners to check with the building Hazardous Materials Register to determine whether the window putty contains asbestos.

   b) Where ACM window putty exists, the cleaners must avoid damaging the putty.

i) Soft squeegees, cleaning solutions and cloths may be used to clean the glass because they may come in contact with the ACM window putty without increasing the risk of damaging it.

ii) The scraping of windows to remove paint spots or tape spots may damage the ACM putty and must be undertaken with care.

c) In the circumstance where cleaners identify that the ACM putty is loose or dislodged prior to commencing cleaning, the cleaners should:

i) Leave the affected window pane uncleaned.

ii) Cover the damaged section of ACM putty with duct tape or similar adhesive material to keep it in place.

iii) Notify their supervisor so a maintenance request can be raised and remedial action taken.

d) If damage occurs or the condition of the ACM putty has deteriorated sufficiently for fragments of the putty to become dislodged during the cleaning process, the cleaners should:

i) Cover the damaged section of ACM putty with duct tape or similar adhesive material to keep it in place and notify their supervisor so a maintenance request can be raised and remedial action taken.

ii) If the cleaner is Asbestos Awareness trained, they should double bag the dislodged ACM putty in zip lock bags, label it with asbestos warning stickers and bring it to their supervisor.

Note: In either case, a licensed Asbestos Removalist must be contacted to collect and dispose of the waste.

e) Clear lines of communication should be set up between the cleaners, their supervisor, ANU maintenance staff, a licensed Asbestos Removalist and a licensed Asbestos Assessor. This will allow a timely response if loose or dislodged ACM putty is observed.

6) A section for all workers to sign and date the SWMS after they review and, where required, amend it.

5.2 Window Resealing/Repainting

Sealing of ACM window putty with a non-ACM sealant is an acceptable method of maintenance for sections of ACM putty that have begun to deteriorate. Repainting existing ACM putty is also appropriate and will not increase the risk of damaging the putty.

In collaboration with the third-party contractors who are hired to undertake window resealing/repainting activities, a Safe Work Method Statement (SWMS) should be developed for resealing/repainting windows. It should ensure that current resealing/repainting procedures are considered so that all risks, if present, can be identified and mitigated.

The SWMS document should include the following items:

1) Purpose of the activity and the standard to which it is to be performed.

2) Training and competency required to perform the activity (i.e. working at heights, asbestos awareness, first aid, on the job training, etc.).

3) Equipment used to complete the activity (i.e. ladder, PPE, sealant, caulking gun, knife, paint brushes, paint, etc.).

4) Safety considerations for all risks involved (i.e. working at heights, dropping tools from height, broken glass, hazardous office equipment/materials, ACM window putty, etc.).

Note: If equipment other than soft sealant or paint brushes comes into contact with ACM window putty, the additional equipment should be assessed to determine if its use will increase the risk of disturbing the ACM window putty. Alternative methods need to be considered if the risk increases (i.e. using a wet finger to smooth out sealant instead of using a plastic/metal putty knife).

5) Steps involved in the current resealing/repainting procedure. The following points should be added to the current procedure if they are not already present:

   a) Repairer to check with the building Hazardous Materials Register to determine whether the window putty contains asbestos.

   b) Where ACM window putty exists, the repairer must avoid damaging the putty.

      i) Soft sealants may be used to reseal the windows because they may come in contact with the ACM window putty without increasing the risk of damaging it.

      ii) Soft bristle or foam paint brushes may be used to repaint the window frames and ACM window putty because they will not increasing the risk of damaging the ACM.

      iii) ACM window putty must not be sanded or scraped in preparation for repainting. A plain cork block may only be used to gently knock off loose paint flakes.

      iv) The scraping of windows to remove excessive sealant or paint may damage the ACM putty and must be undertaken with care.

   c) In the circumstance where repairers identify that the ACM putty is loose or dislodged prior to commencing resealing, the repairer should:

      i) Reseal the ACM putty with sealant, and repaint where required.

   d) If damage occurs or the condition of the ACM putty has deteriorated sufficiently for fragments of the asbestos putty to become dislodged during the resealing/repainting process (i.e. the work makes the condition of the ACM putty worse), the repairer should:

      i) Cease resealing/repainting and leave the affected window pane unsealed/unpainted.

      ii) Cover the damaged section of ACM putty with duct tape or similar adhesive material to keep it in place.

      iii) Notify their supervisor so a maintenance request can be raised and remedial action taken.

      iv) If the repairer is Asbestos Awareness trained, they should double bag the dislodged putty in zip lock bags, label it with asbestos warning stickers and bring it to their supervisor.

      v) A licensed Asbestos Removalist must be contacted to collect and dispose of the waste and remediate the area where putty was dislodged.

   e) Clear lines of communication should be set up between the repairer, their supervisor, ANU maintenance staff, a licensed Asbestos Removalist and a licensed Asbestos Assessor. This will allow a timely response if the condition of loose or dislodged ACM putty worsens.

6) A section for all workers to sign and date the SWMS after they review and, where required, amend it.

5.3 Window Replacement

A licensed Asbestos Removalist should be engaged to replace broken window panes if the window putty is known to contain asbestos or if the putty is presumed to contain asbestos. A list of appropriately qualified and licensed Asbestos Removalists can be found at:

https://www.accesscanberra.act.gov.au/app/services/licence/#/asbestos-removalist

The licensed Asbestos Removalist is required to prepare an Asbestos Removal Control Plan that should be reviewed by ANU prior to commencement of works. Although not required, a licensed Asbestos Assessor may also review the Asbestos Removal Control Plan.

At the completion of the removal works, a licensed Asbestos Assessor must perform a clearance inspection and issue a clearance certificate for the removal work.

Whilst non-friable, airborne fibre monitoring may also be carried out during ACM window putty removal.

6. References

These guidelines are for internal use only and references the following documents:

- Australian Capital Territory Work Health and Safety (How to Manage and Control Asbestos in the Workplace Code of Practice) 2014

  Note: The associated Model Code of Practice was updated by Safe Work Australia in 2016 (https://www.safeworkaustralia.gov.au/doc/model-code-practice-how-manage-and-control-asbestos-workplace). To have legal effect in a jurisdiction, the model Code of Practice must be approved as a code of practice in a specific jurisdiction. When this guideline was produced, the 2014 version of this code of practice was still in effect in the ACT.

- Australian Capital Territory Work Health and Safety (How to Safely Remove Asbestos Code of Practice) 2014

  Note: The associated Model Code of Practice was updated by Safe Work Australia in 2016 (https://www.safeworkaustralia.gov.au/doc/model-code-practice-how-safely-remove-asbestos). To have legal effect in a jurisdiction, the model Code of Practice must be approved as a code of practice in a specific jurisdiction. When this guideline was produced, the 2014 version of this code of practice was still in effect in the ACT.