

在商業/住宅樓宇和公共場所進行裝修工程是常見的事。如果施工不恰當，就會產生難聞氣味和塵埃飛揚，從而降低場所的室內空氣質素。施工時所產生的空氣污染物還會從一個樓層向另一個樓層擴散。這些都可以透過一些良好的工作守則予以避免。

裝修工程通常會產生哪些空氣污染物而引致室內空氣質素問題？

裝修工程中產生的一般室內空氣污染物包括：

- 磨光或打磨建築材料時所產生的塵埃；和
- 塗料、溶劑和黏合劑中的揮發性有機化合物所產生的刺激性氣味。

在裝修過程中有哪些原因可能導致室內空氣質素問題？

下列情況可能在裝修過程中會導致室內空氣質素問題：

- 施工場地沒有被妥善隔離，導致污染物擴散到其他地方。
- 沒有設置專用的排氣裝置，導致施工場地空氣污染物增加。
- 沒有設置屏障或圍欄以控制在切割和鑽孔過程中所產生的塵埃。
- 使用含有高溶劑成分的建築材料，如塗料、黏合劑、油漆和稀釋劑等。
- 塗料、溶劑、清潔劑之類的建築材料在使用後沒有妥善密封、存放或處理。

如何知道裝修過程中存在室內空氣質素問題？

當你身處於或靠近裝修場地時，如果你聞到刺激性氣味，或感到眼鼻刺痛、頭痛、頭暈、噁心、或呼吸困難，就可能有潛在的室內空氣質素問題。

如何改善在裝修期間和裝修後的室內空氣質素？

下列各項措施有助在裝修期間和裝修後改善室內空氣質素：

裝修期間

- 在人流較少或非辦公時間內進行裝修工程。
- 設置一些屏障將裝修場地與其他地方隔離，以降低交叉污染。
- 在工作區域中安排設有適當控制裝置的專有排氣設施，以降低塵埃和其他污染物的散發。
- 如裝修工程是位於空調場所內，應把通風系統的出風口及入風口封閉，以減少塵埃和其他污染物對相鄰區域的擴散。

- 較平常更加頻密地檢查和更換空調系統的隔塵網，使其能夠吸納在進行裝修的區域所產生的更多塵埃。

- 用屏障或塑膠布料把產生塵埃工序的區域圍起，並在磨光、切割、和鑽孔之前用水濕潤材料的表面，或者盡可能把這些工序在裝修區域外的工廠進行。

- 使用較環保的低揮發性建築材料，如：含低揮發性有機化合物的漆料/地毯/牆紙/地板，不含甲醛的黏合劑或其他帶有環保標籤的產品，以減低揮發性有機化合物的散發。

- 以水劑漆料代替溶劑漆料。如必須使用溶劑漆料，則應避免使用噴灑器而改用油刷或滾筒刷塗抹。這樣可減少噴出過多漆料，造成浪費。小心估計需用的漆料數量，免得購買的漆料多於所需。

- 盡可能使用預製傢俬和於裝修場地外製造的產品，以減少裝修工程中產生的污染物。

- 通過適當的材料規格及施工規範，以減少破壞現存的裝修設施。

- 在使用塗料、黏合劑、清潔劑和其他揮發性有機化合物的過程中，必須嚴格遵照製造商的指示，並妥善存放這些材料。

裝修後

- 清理裝修場地，並在要進駐前的一段時間以大量新鮮空氣進行淨化。
- 在進駐後的最初幾個月內保持高排風量，以降低該場所的污染物水平。
- 當需要更換傢俬時，選擇含較低甲醛和低揮發性有機化合物的傢俬。
- 如果使用的新傢俬含有甲醛黏合劑，讓這些傢俬吹風數日或數週後才搬進室內。

如想得到更多資料，請聯絡：

室內空氣質素資訊中心

香港九龍塘達之路 78 號生產力大樓一樓

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Indoor Air Quality

Information Centre

室內空氣質素資訊中心

環境保護署

ENVIRONMENTAL

PROTECTION DEPARTMENT

健康的裝修工程

Healthy Renovation

Renovation is not uncommon in office/residential buildings and public places. If it is not properly done, it will generate irritating odour and dust particles, degrading the indoor air quality (IAQ) of the premises. The air pollutants generated can also spread easily from one floor to another. All these can be avoided through some good practices.

What are the common indoor air pollutants generated from renovation works causing IAQ problems?

Common indoor air pollutants generated from renovation works include:

- dust from polishing, sanding, or grinding of building materials; and
- volatile organic compounds (VOCs) from paints, solvents, and adhesives etc. leading to irritating odour.

What are the possible causes of IAQ problems during renovation?

The following causes may lead to IAQ problems during renovation:

- The work areas are not isolated properly resulting in spreading of pollutants to other non - renovated areas.
- Dedicated local exhaust is not provided leading to accumulation of air pollutants in the work areas.
- No barrier/enclosure is provided to contain dust emission during cutting and drilling processes.
- Use of building materials such as paint, adhesive, lacquer, and thinners etc. that contain high solvent content.
- Building materials such as paints, solvents, clean-up materials are not properly sealed, stored or disposed of after use.

How do I know if there are IAQ problems during renovation?

If you smell irritating odour or experience symptoms such as nasal and eye irritations, headache, dizziness, nausea, or

breathing problem at or in the vicinity of the areas under renovation, there may be potential IAQ problems.

What are the tips to reduce IAQ problems during and after renovation?

The following are some good practices that can help minimize the IAQ problems during and after renovation:

During renovation

- Schedule the renovation work for periods of low occupancy or non-office hours.
- Isolate the renovated areas from other areas by installing physical barrier to minimize cross-contamination.
- Arrange dedicated local exhaust with suitable control devices in the work areas to reduce dust and other contaminants.
- Seal off the inlets and outlets of the ventilation system in the work areas within air-conditioned premises to minimize the spread of dust and other contaminants to adjacent areas.
- Inspect and change the air filters of the air-conditioning system more frequently than usual to allow for higher dust load where renovation works take place.
- Conduct dusty processes in areas enclosed by partitions or plastic sheets, and dampen the surfaces with water before sanding, cutting, and drilling, or, if possible, conduct all these in off - site workshop.
- Use environmentally friendly low-emitting building materials to reduce off-gassing of VOCs, e.g. water-based paint, low-emitting carpet/wallpaper/floor tiles, formaldehyde-free adhesive or any products with green label.
- Replace solvent-based paints with water-based paints. If solvent-based products cannot be avoided, apply them with hand brushes or rollers instead of sprayers to reduce the use of thinners. This also minimizes overspray and wastage. Make a good estimate on the amount on paint to be used and do not buy more than is necessary.
- Use pre-fabricated furniture and off-site manufacturing products as far as practicable to reduce generation of pollutants during renovation work.
- Minimize demolition/disturbance of existing finishes

through careful specification of appropriate materials and innovative installation techniques.

- Read and follow closely the instruction of the manufacturers in handling paints, adhesives, cleaning agents, and other VOC products and store them properly.

After renovation

- Clean up the renovated areas and supply large amount of fresh air to purge them for a period of time prior to occupation.
- Maintain a higher rate of ventilation during the first few months of occupation to help reduce pollutant levels of the renovated premises.
- Select furniture with low emissions of formaldehyde and other VOCs when it is necessary to replace the old one.
- If new furniture containing formaldehyde adhesives is used, air them out for at least several days or weeks before they are admitted indoors.

For more information, please contact:

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