

「创新灵感 - 创意之问」

# 如何解决窗户缝隙积灰清理

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## How to Clean Dust Accumulated in Window Gaps

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### 1 现象 Phenomenon

日常家庭清洁中，窗户缝隙是最容易被忽视的角落，尤其是窗框与窗轨连接处。因窗户长期开合通风，细小的灰尘、毛发、飞虫遗骸、植物碎屑等，会沿着气流悄悄钻进这些狭窄的缝隙中，逐渐沉积。特别是推拉窗的轨道槽，宽不过一指，深度却常达几厘米，日积月累，缝隙内会形成一层灰黑色的顽固积垢，不仅影响美观，也成为室内灰尘循环的来源之一。

During daily household cleaning, window gaps are often the most overlooked areas, especially where the window frame meets the track. Due to frequent opening and closing for ventilation, fine dust, hair, insect remains, plant debris, and other particles are carried by airflow into these narrow gaps, gradually accumulating. Particularly in sliding window tracks—which are no wider than a finger yet several centimeters deep—a

stubborn layer of grayish-black grime builds up over time. This not only affects the appearance but also becomes a source of indoor dust circulation.

### 2 问题描述 Problem Description

擦拭窗户时，普通抹布厚而蓬松，无法探入窄缝深处，只能清洁表面，缝隙底部依然藏污纳垢。使用牙签或棉签时，它们容易折断，且清理范围有限，效率低下，反复作业仍难以彻底。吸尘器的标准吸头尺寸远大于缝隙宽度，无法形成有效密封，细小灰尘根本无法吸除。更令人困扰的是，即便费力清洁一遍，不久后灰尘又会重新堆积，仿佛永远清不干净，严重影响居住环境的整洁与健康。

When cleaning windows, ordinary cloths are too thick and fluffy to reach deep into narrow gaps, leaving the bottom layers still dirty. Using toothpicks or cotton swabs is inefficient—they break easily and cover only

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limited areas, making thorough cleaning difficult even with repeated effort. Standard vacuum cleaner nozzles are too large to fit tightly into these gaps, failing to effectively suck out fine dust. Even more frustrating, after laborious cleaning, dust quickly reaccumulates, as if the gaps can never stay clean, significantly affecting the tidiness and hygiene of the living environment.

### 3 初步思考 Preliminary Considerations

我们是否可以寻找或设计一种更贴合缝隙形态的清洁方式？或许是改造身边的小物件，或许是组合现有工具，让它既能深入缝隙深处、彻底清除积

尘，又能轻松操作、不费时不费力。目标不只是清洁，更是一种可持续、易维护的居家打理方式，让窗户缝隙不再成为卫生死角。

Can we find or design a cleaning method that better fits the shape of these gaps? Perhaps by repurposing everyday objects or combining existing tools, we could create something that reaches deep into crevices to remove accumulated dirt thoroughly, while remaining easy and efficient to use. The goal is not only to clean but also to establish a sustainable and manageable way to maintain household hygiene, ensuring that window gaps no longer remain hidden dirt traps.

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