Summary

When one of the oldest healthcare facilities in France, the Hospitals of Strasbourg (HUS), went looking for a solution that would help them manage their asbestos data, their end goal was to prevent all risks related to Asbestos for HUS personnel as well as any external contractors. Their search finally ended when they combined their centralized database hosting all their asbestos-related data with Tessellat, a BricsCAD-powered app developed by Liris, a local BricsCAD partner.

Challenge

The Hospitals of Strasbourg was founded in 1105. It is now a group of five hospitals with over 630,000 square meters of facilities. It is also the number one job provider in the Alsace region of France, with over 12,000 employees, including 3000 medical doctors. Its missions include care, research, and teaching.

Because many of their facilities were decades, if not centuries old, minimizing the risks of asbestos to their employees and third-party contractors was something they had to take seriously. In 2015, roughly 70% of the 630,000 square meters of their facilities required asbestos data management to prevent the sanitary, legal, and financial risks associated with asbestos.

Asbestos data management translates into a major document management challenge. Each building section containing asbestos must have the correct documents associated with it, and any action taken to diagnose, control, audit, neutralize, or remove the asbestos must be fully documented with a description, names, addresses, dates, and other required data. This is not a simple task.

At HUS, the situation was becoming unmanageable. Their facility management personnel struggled with the traditional, decentralized way they managed documents. Without a central location to house the asbestos data and an easy way to relate this data to specific locations, it was difficult to access or share documents. They could be unavailable when needed, siloed in an employee's device, or in the worst-case scenario, lost.

This made providing all relevant documents to third-party contractors before they started work in HUS facilities difficult. Some activities were conducted but never documented accurately. Other activities were duplicated because documentation was lost or incomplete. If the documents for an asbestos diagnostic were lost, the facility would be subject to another diagnostic by a different third-party auditor.

To solve these unique document management problems, HUS needed a technology that would do two things. It would centralize all their asbestos documentation, so it was always available when needed and easily relate these documents to the correct facilities.

> *"When we launched this project, asbestos information was difficult to access and very complex due to its regulatory and technical nature. Our ambition was to make it easy to access and consume for all."*
>
> - Alexandre Braboszcz, Project Manager

Solution

The solution that finally fit the asbestos data management needs of the Hospitals of Strasbourg started with replacing its traditional methods of storing documents with a centralized database to host all of their data related to asbestos.

The other part of the solution was a custom application called Tessellat that was developed by Liris, an independent company based in Strasbourg founded by 3D experts. Liris has been delivering reliable, economical BIM solutions to business owners for over 20 years. Previously an Autodesk ecosystem partner, they have been a partner of Bricsys in the French market for the last five years. Liris created a dashboard and a graphical user interface, powered by BricsCAD, that connected to the centralized database HUS had developed. The final solution checked all the boxes.

Result

The centralized database that the Hospitals of Strasbourg developed in-house gave them a single source of truth for all of their asbestos documentation. The solution wouldn't have been possible without that first step. But it was when that data was connected to the BIM capabilities of BricsCAD that it became the perfect asbestos data management tool. There were many reasons for this.

Economical and Simple to Use

The total acquisition cost for HUS was 10-20% of the price of alternative and dedicated facility management solutions, and Liris was able to take the solution from an idea to live in 12 months.
Tessellat uses the .dwg format, an open file format used for technical drawings and blueprints by most CAD software, making it simple and economical to deploy and use.

Tessellat is also flexible to fit the needs of different users and asbestos management at different stages of a building's lifecycle. The BricsCAD-based graphical user interface gives users the ability to examine and tag 3D representations of HUS facilities, and the dashboard interface allows them to access building-related statistics and export the results in CSV format.

Document Association

Tessellat, in combination with the Hospitals of Strasbourg's centralized database of asbestos data, makes document management problems a thing of the past.

Tessellat's BricsCAD-based graphical user interface is powered by BricsCAD's building information management capabilities. With the BricsCAD interface, users can open and edit 3D drawings of the HUS facilities in their native .dwg format.
This means existing blueprints can be imported into Tessellat simply, and users can view buildings as they appear in real life. Then they can relate the documents from the HUS centralized asbestos database to sections of the building in the 3D drawings without switching applications.

"By centralizing asbestos information we actually made it more accessible. The graphical representation of this information in the floorplans of our facilities is very intuitive to use. It is now a natural and spontaneous behavior of all our maintenance technicians to access and review Asbestos information before any intervention in the facilities."

Marine Charles, Technical Designer, HUS

Third-Party Management

For any building section and building maintenance intervention of a third party on the HUS premises, the BricsCAD-based solution allows facility management personnel to extract an up-to-date asbestos data folder for any section of their 630,000 square meters of facilities. This folder contains all the documents the third party would need access to in order to begin work.

After any intervention by a third party, asbestos-related documents from the activity are added to their centralized database, and the detailed sections of floors, walls, or ceilings from the intervention are tagged accordingly in the building's drawings.

Streamlined Workflow

Tessellat, the Hospitals of Strasbourg's BricsCAD-based solution, not only solved their problems with document management, it made the process simpler. Because they can manage all of their asbestos-related data from one application, they can be sure that it is accurate and up-to-date. The flexible interface not only made relating asbestos data to facilities simple, it also ensured that third-party contractors had all the information they needed, and no activity was duplicated because of incomplete documentation.
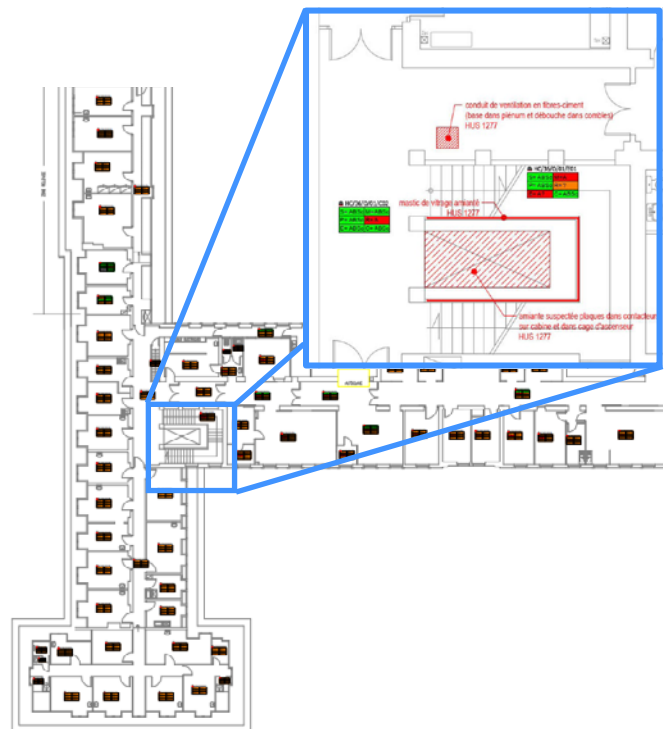
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