



## BEST PRACTICES COURSE – WEEK 19 – Renovation Projects PART 5 - Renovation Using Tags and Filters in AC15 and Later (Basics)

Welcome everyone to the ArchiCAD Best Practices training lesson on renovation and remodel projects. This is week 19 part 5, where we will focus on how to use the renovation tools that were introduced into ArchiCAD 15. So if you are in ArchiCAD 15 or later, this video training applies to you. If you are in an earlier version, you can see what's up ahead when you upgrade at some point. [0:00:30]

Let's get started. I am going to draw a basic shape here for a building. Let's say that's existing, and we want to designate some new parts as new. So you may say this is a rather silly addition, not too interesting, but the interesting part comes in how you manipulate it to get the renovation options. So let me bring up the Window menu, Palettes, and the Renovation Palette here. This is something that you can open and close whenever you wish. If you are working on a remodel project in ArchiCAD 15 or later, I suggest you have it open much of the time. [0:01:21]

Now we are currently looking at the existing plan. We haven't made any changes to it or said that certain things are going to be removed, so if we were to look at any of the other ones, we would see similar. The planned status or the end result of the building is the same as the existing. But now, what I am going to do is select several of these elements here and tell them to be tagged as New. You can see these three things at the top: Existing, To Be Demolished, and New. These are status tags. [0:01:55]

Basically, when I have elements selected and I click, those elements get re-designated as whatever I have clicked on. It says "Default Elements". That means that the elements that I have been drawing are set to be existing. That means if you are doing a remodel project, they exist; and at this point they are not scheduled to be demolished. They are going to stay. Now you will notice these little gaps here. If I zoom in or out, they will go away. Why? Because it's smart enough to know that things that don't exist yet should not be accounted for. You shouldn't have a gap there. [0:02:32]

Now if I switch from 'Existing Plan' to 'Planned Status', we will see there is the information I drew, because these elements are now shown. Now these renovation filters are pretty easy to understand and they are configurable. Now what about the 'Demo Plan'? The demo plan doesn't look any different because I haven't marked anything for demolition. Let's see how we can mark things for demolition. Let's go to the 'Planned Status' here. I am going to take these that were formerly exterior and remove them to work out a new interior. [0:03:12]

And what I need to do is actually select this wall and split it so that part is going to remain and part of it is new. I am going to split it with the hatchet, go to the main reference line of this wall, use the eyeball and click to say I would like to leave this part selected. You will notice that it's overlapping here, but that's alright. Now we have three walls all meeting at the corner. But this wall here, which was part of



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the original building, I am going to mark as a demo. So you can see how it disappears. I will do the same with this one. I will use the hatchet to split it by the main reference line here, click with the eyeball to say that this is the part that I want to remain selected, and designate it as demo. [0:03:54]

Now as I zoom in or out, you can see how it cleans up the intersections. If I go back to existing plan, you can see here is the original building. Now let's look at the demolition plan. When I do demolition plan, you can see that these pieces of walls are now drawn in a different style. This has to do with what are called the 'Overrides' for a particular renovation filter. So let's start to look at how the renovation filter can be set up. So these are our renovation filters; different variations. Let's look at how they are set up. [0:04:32]

When we are in the existing plan, it says 'Show existing and demo elements and hide the new ones.' And just show them. That's why everything looked normal. When I went to the demolition plan, it still hid the new elements, but it made sure that the elements that were going to be removed or demolished were in an override state. What does that mean? It means that they are drawn in a different style. In fact, you can define the renovation override styles by clicking here. [0:05:03]

You will see the existing elements right now, if you were to tell them to be overridden, might change. This is less frequently done than demo or new elements, where with demo elements, you can see that when we have this set up in an override state that they are going to be drawn as dashed red line. Now they could be any color, they could be any line type. In fact, you can turn these off and say you don't want to override certain things. You can choose which ones you want. [0:05:40]

But for right now, this gives us a nice, clean effect. The renovation overrides changed in terms of defaults in ArchiCAD 15, 16, and 17. Graphisoft, based on experience and feedback from users, went with a different style than originally. So I believe in ArchiCAD 15 the demo elements were set to be in yellow or something like that to indicate that they were going away. In the U.S. at least, they are commonly done in any sort of color drawing as a dashed red line. So they made the U.S. defaults for elements to be demolished in their override to be in this style. [0:06:30]

Now in the international version, I haven't double checked, but you may find that to be different. We'll be exploring more of the details here. I just wanted to make it clear that this is why those elements look different. Now if we look at the new elements here, they are not going to have a special line type but they are set to have a different color. We haven't seen this yet, because we haven't looked at a renovation filter that has the new elements showing and overridden. [0:06:58]

Let's take a look at what that means. So in the demolition plan, the preview shows that the demo elements are going to be shown in dashed red lines. After demolition, they will be hidden. New construction, in this particular renovation filter, says show the new elements but override them. Make them a different style. In the planned status, they show in their natural or normal style. So let's look at



the new construction for real. When I say OK, you will see that switches here in the renovation filter. So much like when you are in the Story Settings dialog or the Layer Settings dialog, if you make some changes and say OK, when you leave that dialog box, you will be in a potentially new setting. [0:07:49]

Here it did switch us to the new construction setting. And you can see the new elements now are not dashed, but are drawn in green. They are drawn with a different fill to make it obvious what is new. If I switch this to planned status, they will be put in their normal style, much like the other elements, so you can't identify what is existing and what is new. The idea here is that we are able to tag elements based on their status. Do they exist and are they going to remain? Do they exist and are they going to be demolished? Or do they not exist and are they going to be added new? [0:08:33]

Now if you think about it, this is a system that will handle a significant portion of renovation and remodel projects, but not multiple-phased projects. So it does not handle something where you want drawings saying, "After Phase 1, we have this; then in Phase 2 we build that." It does not handle that natively. There have been a lot of suggestions or requests for that. I imagine that at some point, Graphisoft will add that in, but right now it's just 'Existing', 'Demo' and 'New' are the different options there. [0:09:14]

Now let's take a look at what happens with windows and doors. Let's go back to the existing plan, and we're going to pop in a window here and a door there. And let's say that here is a door. But remember we are going to build something new here, so maybe this door is going to be demoed. After all, the wall is going to be removed. And we are going to have a new door in its place after the project is done. In fact, let's change this to the planned status, and pop in a new door here. [0:09:58]

Now what I want to do is make sure this door is designated by itself as 'New'. The door, by default, was set to be existing, but now I am going to make it new here. Let's say that maybe there is going to be a window here. And this wall is going to be removed, because maybe it's just too close to this area. I will drag it down to this area here. So let's take this window and designate it as 'Demo'. So now the window goes away. Let's now look at the different options. [0:10:36]

If I go to the existing plan, you can see that the window exists, and the door exists. If I go to the demolition plan, you can see how it indicates that the two walls, including the door here, are going to be demoed. And this window is going to be demoed. Interestingly, it's showing this hole here. The clean wall, in other words, there's nothing there, but it's going to be opened up in order to put in a door. Now if we say 'After Demolition', this basically says 'Show only the elements as they exist.' They are going to remain. What happens after demolition? [0:11:19]

So after demolition, this window hole exists, but we haven't filled it in. and here, after demolition, we've opened up a hole for putting in the door. And now let's look at new construction that highlights the elements that are new. And it's a little subtle, but this door is set to be in that green color to highlight it.



Here I guess there is the filling in of the wall is also set to be green. If we zoom in on this, and maybe put this into true line weight, then we would see it's green in that area there. [0:12:03]

You can see that this is sort of a green color. Let's switch this. Let's zoom out a little bit and switch this to the planned status. We can see how now the door looks natural or normal and this has been filled in. so the windows and doors have the same options if it is a window or door that is part of an existing wall that is going to be removed, then of course it automatically gets demoed. If it is one that is going to be demoed by itself, then it will have its own designation here. [0:12:42]

And of course, if we are putting in a new element like this, into what was an existing wall, the wall stays as existing, but the door in this case was designated as new. I will point out that as I am moving back and forth between these different states that whenever I select something, it indicates that the status - and I can change it here in this palette - it will also show up if I open the wall or door or element settings. It will also show up under tags and categories. Tags and categories here, you can see the renovation status. And we can change it here. [0:13:32]

So why would you do that? I always use this renovation palette, but if you don't have that open or sometimes if you have multiple things selected, then it's somehow convenient while you are working on other stuff to just change the status of that. now unlike other things, when I go into the wall tool by itself when it's wall default settings, in other words, nothing is selected, if I go down to the renovation area, I cannot tag the default for whether it's existing, demo, or new. I can make the next walls I draw a certain height; I can change what type of wall they are. I can do all sorts of things, but I cannot change the default settings for renovation, meaning the next things I draw. [0:14:23]

What it's intended is that instead of setting the default for walls, doors, or anything else, you set the default for all elements to be a certain category. So the way this is intended to work is that you will be drawing something. Generally, you are going to start out with the existing building, or at least the existing context for the project. And your default elements will be set to be 'existing to remain'. Then at some point, you may have some elements that you know you are going to remove, but you might want to put them into the 'as-built'. So I will decide to switch to 'demo elements' here. [0:15:13]

Let me go and put this on the interior wall. I will do it as a simple interior wall here. So these two elements, because I drew them while the default was set as 'to be demolished', are going to be in a demo state. And if I want to draw new elements, I can also change the default, but you will notice that this is grey. I can't change the default to new. That is because I am showing the existing plan, so they wouldn't show up. I need to switch to either new construction or planned status. Let's put it into new construction and say that I wanted to draw walls similar to this one. [0:16:12]

Maybe there is going to be an extension on the other side of the building. And maybe it's going to extend that part there. In fact, I did not - let me undo that. Now that I am in the new construction, I



need to click here to change the status. That means that these new elements are going to be drawn in that status. So you can change your default. Obviously in new construction we are hiding the demo elements, that's why this is grey. [0:16:52]

If I now switch to existing plan, you can see how these elements that I drew with the default being set here are demo elements. If I go to demo plan, they show up. If I go to the new construction, you can see the new elements that were added. Now let's say that we were going to keep this wall, but it was going to change, because it's no longer an exterior. Maybe we need to demo this and replace it with a similar wall. So what would we do? I am going to go the existing plan and put in an interior wall. This gets a little bit confusing, and I am going to show you something that is missing from these renovation filters. [0:17:47]

In fact, in MasterTemplate, we have added in a couple of variations that show all of the combinations. In other words, right now, in existing, demo, or after demolition, we are only seeing the existing information. And in new construction and planned status, we are showing the new things, but not any of the demo. If we want to see all of the above, then what we need to do is create a new renovation filter. I will just say maybe duplicate this existing plan one, and we will call this "06 Show All". So this is now a new renovation filter that initially is a duplicate of the existing, but I am going to make this one show the new elements. [0:18:36]

So how is it different that the planned status? In the planned status, we don't show the demo. In the show all, we are showing both old and new here. And let me do one more. I am going to duplicate this, and say "Show all with Overrides". Then say for this one, we are going to override this. So I now have two. And let me rename this so it has a "07". The numbers are not consequential except for that its alphabetical or sorted in order in the popup menu. By putting it in with a number, it puts it in a sequence in the popup menu. [0:19:20]

We will say OK. So now "Show all with Overrides" is what I have currently selected. You can see how it's showing the demo and the new elements along with the existing. If I go to the "06 Show All", then it's a little bit more confusing, because we can't see what is demo and what is new. Sometimes the overrides really help to clarify that. The reason I wanted to do this - I am going to show this with overrides here - let's say that I wanted to demo this piece of wall here and replace it with an interior wall. What I will do is again select this wall, I will split it from the main reference line side, and now this piece is going to be demoed. [0:20:09]

So I am going to designate it as a demo element here. Now I am going to replace it with a wall like this one. Now it's maybe not super obvious onscreen, but this is a thinner wall that is an interior, and I am going to eyedrop that. when I eyedrop it, it's set up to draw walls like this, and I am going to draw some walls into the middle of empty space to show you that even though I eyedropped a demo element, it's



set up as existing. Why? Because the default is set up as existing. So this is an important thing to realize in terms of your workflow. [0:20:58]

When you're working on the project, you are going to focus your work for periods of time on creating existing elements that are going to remain and perhaps start adding elements that are going to be new, or drawing elements that you need to put in, but they are intended to be demoed. So you will choose which things you want to focus on at any given time by clicking on the default elements. If I want to pick up the settings of an element such as this one here and eyedrop it, it does not switch the default to that, unlike the eyedropper, where the eyedropper works in many cases. [0:21:39]

When I eyedrop an element such as a door - remember this door is new here - and I pop it in, this door you can see is blue rather than green. This door is set up to be existing to remain. So you can eyedrop any type of element that you wish to pick up the settings, but when you place the element when you are drawing, it will use the renovation palette settings for that. So now that I have explained that, let me undo these two here. I will eyedrop this wall, and now I am going to draw in the interior wall as a new element, so I am going to be creating a new element on top of this here. [0:22:30]

We will flip this around, and drop it down in here. Now you can see there is a demo wall and there is the new interior wall. And let's put in a door here. And this door is going to be new to go into that space. Maybe it's a closet or something like that; whatever. So now if we zoom out a little bit and show existing plan, we can see what's existing. When we go to demo, you can see that this wall is now set up to be demoed. After demolition there is going to be a hole there. In new construction, we are going to see all of the new stuff, with this green - in this case, the override. [0:23:22]

And planned status, we will see it ultimately in its final state. And the show all is one way that we can look at all the elements without overrides. And here is a way that we can see them with the overrides. I like having these two additional ones, because they allow us to see everything and they are good variations to be able to work with. Okay, so we have a couple of questions here that are related. Ken Brooks asks, "Why was there no green fill at the window that was demoed?" And Dave Norman asks, "In the new construction filter, in order to in-fill a demolished window, do we need to insert a piece of wall into the demolished window opening?" [0:24:08]

So those are two very closely related questions. Bob George asked, "Does the renovation filter work on sections and elevations?" okay. So let me take these in sequence. So in terms of the window that was demoed. If we go to the Demolition plan here, you can see that this window is in dashed status, and it's being demoed. Demo elements do not have a fill in this case. How did that happen? How did the walls end up being simple as opposed to having all of that detail? In the renovation filter options for elements to be demolished when they are overridden, there is a determination of the style. So for elements that are being demoed, it says that the fill type should be 'air space'. [0:25:06]



So that means that it's going to be empty. It's not going to have any line work when it's demolished. Now if we wanted to, we could switch this to a 25% fill and have a color in here. By the way, the surface is going to affect it in 3D. So we are going to look in 3D to show how this works. I have made one simple change. I said I would like to make the demo elements show with a percent fill. I will say OK, and you can see now they are shaded in, in terms of the walls. [0:25:42]

Now it appears that the window does not have that shading, and I am not quite sure why that is the case. Obviously these walls that being removed and demoed are showing that way. The door or the window is now showing up with that style. I don't know if there is some override that affects that. Now Dave Norman's question about in order to in-fill a demolished window, do we need to insert a piece of wall? No. basically, the wall here exists going all the way across. The window interrupts it. And by designating the window as a demo element, then it automatically will fill in. [0:26:26]

After the demolition, of course it will be empty. Then in the new construction, it's interesting - in the new construction, it's showing that there is a symbol there. If we go to planned status, now the wall looks normal. So I did not have to add a piece of wall, I simply designated the window as going away, that it's being demolished. So the new construction here, this is certainly something that you could print out, but stylistically it may not meet your needs for a certain type of construction drawing. You can see how the mitered corners here are indicated, and that may or may not be an appropriate way to designate that. [0:27:22]

Let's look at the existing plan here, and look at some of the intersections of things. Right now, the walls are not cleaning up properly, probably because I am using the default settings. Let's select all of these exterior walls. Instead of using the 'Exterior Generic', let's use something a little bit fancier with brick and 2x6 wood stud or something like that. Okay, we zoom in, and it's still showing a line across there. Let me go and switch this to turn off true line weight. So why is this showing a line? I was trying to make it so we could see what was going on here. [0:28:26]

If we go to the renovation filter options, in the existing plan, there are some things here that are a bit subtle. The reason why this is not cleaning up is not part of the renovation filter. So let me clean that up. I will right click on this and say, 'Edit Selected Composite'; that is the command that was introduced into ArchiCAD 17. It opens up the composites definition where I can see that this particular center area is a wood framing here. If I take this one and I right click and 'Edit Selected Composite', we will see that this is set for 'Air Space'. [0:29:20]

So that is why they are not cleaning up is because they are actually not set for the same type of fill. So ArchiCAD says, "It's a change, so we're not going to clean them up." If I were to change this from air space to wood framing here - actually, let me cancel that. That was this area here. I apologize. I was looking at the wrong one. This is the wood framing plus insulation, so it has insulation, which is one reason why it's not cleaning up. If I just made it wood framing, just to show you, then when I say OK, you



can see how it cleans that up. So if it is an insulated wall, then it would not clean up here because this would be an empty cavity and this one would be filled with insulation. [0:30:17]

So that was why that particular change was happening. Now let's say that we took this wall here and stretched this. I will eyedrop it in and put in another wall that is going to be a demo along here. At this point, if I go to the demo plan, we can see that we have a little graphic issue in terms of the way that the wall is being drawn here. It's very easy to see that this demo wall and the exterior demo wall are cleaning up. This particular cleanup is a little bit funny. [0:31:05]

Let me see if we can change the display order, if that will help. So I just told ArchiCAD that I would prefer to have this exterior wall higher in the display order, or in front of the other one. And now we are getting something a bit cleaner in terms of the result there. If we go now to 'After Demolition', of course it will be a clean result because that wall will disappear. Sometimes you have to do some extra tweaking. Let's look at the planned status and what we have. Now interestingly, in the planned status, I hadn't changed the wall type. Therefore this wall is not cleaning up to that because it's a different type of wall now. [0:31:55]

So let's go and say now that I have decided that this building is going to have walls like this, if I eyedrop this and inject with the syringe, you can see how it cleans up here. Of course, I can go around. Now a subtle thing here that I want to point out is that if I eyedrop this existing wall that is remaining, and I inject it into the new wall here, it changed the wall type, but it did not change it to be existing. So again, eyedropping an element picks up its attributes other than its renovation status. And when you inject it or you draw a new one, the status of the one you picked up does not affect the status of the other ones. [0:32:45]

Now if you are unclear on how I am getting the eyedropper, I am holding down the Option or Alt key. If you are on Windows it's Alt. It's the same thing as clicking once on here and then clicking on the element. Now the syringe here, I can inject once and go back to the syringe multiple times. But I can also hold down Command+Option or Alt+Ctrl and get the syringe and keep the syringe active while holding down those keys. [0:33:16]

So again, these elements, while they changed their wall type, they did not change from existing. You can see how they are still designated as new elements. Let's see if there are other questions. "Does the renovation filter work on sections and elevations?" Yes, it does. Let's take a look at that. So we will take an elevation here. Here we have an elevation. As you might guess, this is the original building design. I am going to switch now from the existing to the planned status. And you can see how now things have adjusted. [0:33:59]

Now I have been manually changing the renovation filter to teach you how it works. But each view has built into it a setting that records the desired renovation filter. So this particular elevation in its settings





says 'Use the existing plan'. In a remodel project, I would wager that most of the time your sections and elevations should be set to planned status, because you want to show the end result of the building after the design is constructed. I am going to change this to planned status. This means that every time I double click on this particular elevation, it's going to be that way. [0:34:48]

It's going to be planned status. If I want to affect all of them, I can select multiple elevations. Or I can select in this case the cloned folder that affects all of them. If I go to the settings here for the clone folder, I can switch this to planned status. This will affect all of these elevations. When I say OK and then go to the east elevation, you can see here is the line where the new piece was added. If I go to the west elevation, we are going to see this. What is going on here? This is odd. This is set for the planned status. Remember, we demoed the original exterior wall and replaced it with an interior wall. [0:35:43]

Let's go to the floor plan and see, in the planned status what is going on. So again, these walls were not designated to use that same brick. They were set up earlier when I created the wall type or done the walls with generic. This brings up a general best practice tip, which is while you can manually go and set walls to a particular composite and later change your mind or make a decision and set them to be another composite, sometimes it can be useful to designate all of the walls of a certain type to be a named composite that is not decided on. [0:36:41]

So you can just call it "Wall Type A" or "Exterior Wall Default". By naming it that way, if you later say, "Alright, this "Exterior Wall Default" is going to be made out of brick and framing, etc.", and you define it, then all the walls that are using that particular definition, that particular reference of exterior wall default for the composite will all update. In this case, these guys here were manually set to use the generic wall type, so I have to manually go and change it to - which one was it? I think it was this one here. [0:37:23]

Now I have designated that. If I go to the west elevation, you can see that. I can select any of these walls and change them here. Of course, if I were looking at the south elevation, I would have seen that there were several walls that needed updated. Now, let's take a look in 3D. Notice anything odd? We're looking at the original building. We don't have the new pieces added on. Why? Because the 3D window is set to the existing plan. This can be very confusing when you are first working with the renovation tools. [0:38:08]

I might be on the floor plan, looking at the planned status, and when I hit F3, I am now looking at the existing. In this case, it's totally dramatic, and I am familiar with it, so I don't have a question of what's going on. But if it's more subtle, or you are just not aware of this, you can get really frustrated. So what we have to do is manually switch to 3D view to whatever the status we want, and now we are seeing the new design. [0:38:44]



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So let's see - right now in the view map, we have been working with the plans and elevations. Sections would be very similar to elevations. By setting the setting for the section to use the appropriate renovation filter, just like you are setting it to use a certain layer combination, then you are going to get the result you need. [0:39:11]

Now for 3D, if I want to go back and forth from the floor plan to 3D, it's going to remember what the last status was. But in terms of a 3D view, you can define - remember I can take any view that I want here - and in the view map, say that I would like to define a new view. Let's call this "Front View New". So I am telling myself that this has the new planned status. In other words, the new renovation filter. So let's say 'Create this'. And let's try making one with the existing plan and saving this as a new view. We will call this "Front View Existing". [0:40:06]

So I have now created two views that are very similar. They are the same viewpoint. But I can double click on one, and double click on the other, and it will switch the renovation status. Of course, I could do it here, but it's nice to be able to have a single entry in the view map that will take you to a particular style of view. And remember that this also turns on certain layers, turns on the particular view whether it's from the front or the side or interior, etc. [0:40:43]

So let's look at some other questions. David Rulan asked about what happens with door and window schedules. Good question. Let's see. If I go to the schedules here, here is the door schedule. Right now - and let me move this renovation palette down - right now, it's showing only one door. Remember, I put in several doors, but they probably were all the same. And it says 'Show uniform items as a single entry'. So I will uncheck that. And now, it's still only showing one door. [0:41:23]

Let's look at the scheme settings and see why. In the door schedule, there is a criteria, just like all schedules. The criteria says 'Show Doors' and the library part name is not 'Empty Door'. So it appears that it should show all of the doors. Now, if I look at this, it's only showing one of them. This is the existing plan; let's change this to 'Show All'. And you can see how the schedule now is showing all three of the doors. Let's go to the planned status. It's only showing two of the doors. [0:42:13]

The renovation filter here is affecting the schedule. You may think about a schedule in simple terms as defining certain elements, like doors in one case and windows in another; and a certain style. But there is also this idea of a criteria. There is also the idea of the view settings. So this door schedule here right now if we look at the settings, it set for a particular renovation filter. So in other words, if I double click on this one - I won't make a change, I will just double click on it - you can see how it's only showing the one door that existed in the original project. [0:43:05]

Let's go back to the project and take a look. If I am in the existing plan, yes, there really was only one door here. That's an odd position in terms of the design, but you can see that there really was only one door, and that's what it's listing. So if I wanted to make this door schedule correct here, then I would



want to go to the view settings and say this schedule should use a different renovation filter. Most typically, you would want to say the planned status, so that it would show the end result there. Let's say that in planned status - and I then double click on it, so it's now active - is now showing these two doors. Let's go back to the floor plan, and we will see here are the two doors. [0:43:59]

Let's make sure - this is an exterior door. Let's change this from "D117" to maybe one with a sidelight and a transom so it's more of an entrance configuration. So it will be a rather different door in the schedule. If we go back to the door schedule, we are going to now see - let's see - planned status. Oh, maybe because the door leaf didn't change. Let's go back and change it to be - instead of keeping the door size there, let's pick up maybe make it a double door for now and drag this over there. [0:44:45]

So now if I go back to the door schedule, you will see that we have this 5' wide double door and the other one. I didn't change the numbers, so that's why they look the same. This might be a little small to read, so I will make it bigger so you can read that. Now the other way that you can control the visibility in the schedule is by going into the scheme settings. In the scheme settings, you can add a criteria that says that the renovation status is "New" or "Not Demo" for example. [0:45:29]

So you have some options there. So this is only going to show new ones. These are both new, so it didn't actually change anything. But let's go back to the floor plan and go to the existing plan. Let me show all here. I am going to eyedrop this double door and let's say that there was a double door on the back part of the building here, and this door is set to be existing to remain. And let's give it a number here like that. Now that particular door exists, and if we go to the door schedule, it still doesn't show up. Why? Because in the scheme, it's saying the renovation status is new. [0:46:31]

If I remove this, then you will see that we have that "Door 1" here showing up. So the scheme can control that. And obviously it's common in a door schedule to say that we only want to schedule the doors that are going to be added new. Doors that are existing, we don't need to schedule, because they are going to remain in position. So this is one way to do that for the schedules. So again here, we are only showing the two new doors. And we are now showing the existing door, we are leaving that out. [0:47:17]

Let's see if there are other questions. Kyle Heely, "If you are creating a new building, is there any advantage to use the renovation filter and calling all elements 'New'? I can't see what benefit you would get from doing it. It would work. You could make all your views, floor plans, sections, elevations, etc. use the 'New' renovation filter for the planned status, and it would work just fine. but the way that Graphisoft set it up is that if you're doing a simple project, meaning that if it's a design that does not exist, and you are creating a new building, then I would suggest that simply using the existing status for all elements, and the existing status for all views will give you essentially what we had before ArchiCAD 15 where you are controlling things through layers and other things, but you are not worrying or thinking about renovation. [0:48:27]



Ken Brooks says, "The existing window to be demoed is to be filled in with a new wall, no?" you are right that the existing window - if we go in here - this existing window that is going to be removed is going to be filled in with a new wall. In the demo plan it indicates that we are removing the window. After demolition, it shows an opening here. It's showing it with all of the whole shape of the window; how it was cut around with I guess brick there. [0:49:07]

But it's not going to show it as being filled. If we go to planned status, it fills that in automatically. If we say 'Show all with overrides' you can see - actually, here we are seeing that the new stuff is shown with that override. If we did 'Planned Status' here, or let's say 'New Construction' - alright, there we go. So 'New construction' shows the new stuff with an override. And there it is showing that. This particular setting was with some hatching as opposed to a shade. So it is being shown correctly. So hopefully that answers Ken Brook's question. [0:49:55]

Rick Skorick says, "The fill seems to be on the cut portion only." I think this refers to the same thing.

Okay Tom Downer, "If one prefers to show different wall types for new and existing in the planned status, the demoed doors and windows appear to need some new wall type added, yes?" Alright, let me see if I can parse this question. So, if one prefers to show different wall types for new and existing in the planned status, the demoed doors and windows appear to need some new wall type added. Okay. [0:50:31]

So this option here right now, we are setting the walls to show in a different way. So right now we are doing it in the new construction where it's overriding it rather than planned status. But you certainly could choose in planned status to designate still with an override for the new elements. But you have to be careful about it, because you only get one override style for each category. In other words, if I go to the renovation filter options here, and the renovation override styles, if I wanted to show the new elements in a different way, let's say that I only wanted to change the background color. [0:51:29]

Let's give it a teal color here. I say OK. In this planned status, I will go to renovation filter options and say that in the planned status I want to override the new elements here. Now what it's doing is showing all new elements with this particular color so that it stands out. So this provides clarity. It actually is the same as the new construction in this case, because the new construction filter was set to have the override, and the planned status also has an override. [0:52:21]

So if we want to have two different options, then obviously these were set up that way. The override for the new elements can be simple or can be more complex. We can also potentially change the fill type. This was a simple hatch, the brick face, but we can say we want to make it 25%, and say OK. And we go then to when we have it in override; you can see that it puts it into a 25%. So there are some variations here that I think you will need to play around with. In this case, it says that even though the wall is



drawn or made out of brick, and has all of these skins; we want to override it so that we are showing it just as a percentage of fill. [0:53:13]

Obviously this is funny looking. Here is the planned status as a reference. So you can play around with the override, but remember that the override for any particular category, like new elements, is only one type here. Let's put it back to that brick face that it was, and we'll put these in. I think this is the way it was here. If we look at it, I think this is similar to what we had. Actually, it looks like we didn't have previously in this override; we didn't have a foreground color I think. [0:53:56]

I think it was just a fill type. So if we say OK, then we are seeing just that hatch pattern. Let's see, what did we have here? The fill foreground color was this green, that's right. Now it's the look that we had when we started. Okay. Let's see, Rick Skorick, "Can you not tell the clone folder to open up all 3D and whatever you want?" So this is going back to the question about the 3D views. Each folder of a clone folder refers to views of a certain type. So this is the clone folder for elevations. It is automatically going to get all the elevations that you draw with the elevation marker. [0:54:50]

And the same thing with sections. Right now there are no sections. If I were to draw a section here, let's say like this, then this section is set or will automatically appear in the clone folder with the settings for what the clone folder is for the sections. So if I double click on it, what is it going to be? It's showing the existing conditions. Because remember on the floor plan I was just looking at the new one where we have a door there and we don't have this extension. So if I change the settings for the clone to say that it's going to be planned status instead of existing plan, then when I open up the section it will have the new conditions there. [0:55:43]

But we don't have a clone folder for 3D views, because in 3D there are no viewpoints that we have in 3D window. We do have 3D documents and generic perspective or axonometry. I wonder if we can. I have never tried cloning 3D. Let's see - this is planned status. Let's just try this out. Let me give it a name, "3D Views". So now in our view map, if I go to 'Generic Perspective', it will be whatever was the last perspective I was in. If I go to 'Generic Axo' - well, that's off in an odd direction. There we go, I just did 'Fit in Window'. [0:56:38]

It's just created a clone of the defined 3D views which are in this area here. I think if we put down the camera positions we can have multiple views, and then we can choose for these views to have a particular setting in 3D. But that's different than hitting F3, which just goes to the 3D window with the last settings that were active. Okay, so David Rulan says, "I have to go, will watch the rest later."

Okay. Rick Skorick, "I wanted to change the hardware on an existing door. Would you use the criteria settings to include that door in the schedule?" Okay, so I think this just gets some more tricky things that we are going to be dealing with in the next lesson, which will deal with advanced areas of the renovation system in ArchiCAD 15 and later. And that is, what happens when you have elements that exist that are



not going to be demoed but just changed in some way, like you are changing the hardware on a door. Or you are changing the cladding on a wall. Or you have a roof that exists and is going to remain, but you are adding onto it, or cutting some parts out. So these are different, we are not demoing in some cases; we are simply adding on or replacing part of it. [0:58:06]

So we will be dealing with that in our next lesson. Robert W. says, "I assume the planned status walls can be shown as composite." Yes. And he says, "Never mind, I see now." Okay.

Dave Norman: "On the demolition plan, we normally have demolition notes and labels." Okay, that's an important thing that I have not covered yet. Let's look at that.

"In the existing plan views, these notes would show, although we wouldn't want to see those. One solution is to put the notes on a unique layer, but is there a simpler solution?"

Yes. So let me demonstrate this. This is an area that is part of the basic functionality of the renovation tool, and it is important to know about. So let's go to our demolition plan. Let's put in a label and call it [types a name]. So I have now put in a simple label that I would like to only show when we are in the demolition plan. Now this label right now is set as an existing element. That means it will show up in the existing plan, and it will show up in the planned status. That is not good. [0:59:35]

So what I am going to do is actually designate this as a demo element. Now you may think, *it's an annotation. It's just text. It's not going to be removed.* I am going to designate it as 'To Be Demolished' status. Now what happens? I go to the demolition plan, it shows up. Perfect. But what about the existing plan? Well, because these walls are showing up, and they are going to be demoed, this note is showing. Now that's not actually appropriate, because if we did an as-built or an existing plan, we wouldn't want to specify that it's going to be removed. [1:00:16]

So what we can do is use this option here, which is 'Show on current renovation filter only'. Or, 'Show on all relevant filters'. Now we don't want it showing on the existing plan. I do want it showing on the demo plan. So what I will do is switch to the demo plan and click here. And you will notice that the icon changes to a pin. The pin indicates that it's pinned to this renovation filter as opposed to showing on all relevant filters. [1:00:51]

So these walls are not pinned. They show up on existing plan and demo plan because demo elements show up on both, although they show up with an override here. But, as you may have noticed, in the existing plan, that note disappeared because it's pinned to and only showing on this particular filter. And obviously it won't show up on these other conditions. Now if I select this note, you can see that it's pinned to this particular status - or actually, it's pinned to the filter. [1:01:26]

If I open up the settings for the label, you will see under 'Tags and Categories' that it is 'Show on Renovation Filter'. So this is what it says, is that it's pinned to that particular one. So it's only going to



show on that one, rather than showing on the other ones. The other option is to show it on 'All Relevant Filters', which means like the walls, it would show on existing and demo. [1:01:56]

So this is how you handle the issue there. Now there is a change that was added I think into 16, but possible it was just added in 17. It was a problem in version 15. Remember in the renovation options there was an option for demo elements that was set so that the line type would be dashed. So that makes sense, we wanted the walls to get dashed. But in version 15, it would also make the label dashed as well. So that label would suddenly have this funny dashed look as opposed to being solid. [1:02:47]

But in ArchiCAD 16 or 17, there's something that says 'Annotation elements do not override dimensions, text and labels'. So it's saying "Do not override it, do not use that style on these, just let them be natural." So that way we have a solid line. In ArchiCAD 15 it would automatically override them. You also have an option for drafting fills and lines, so if you were putting in some extra linework or fills, you can say that if they are not really 3D elements, then maybe we don't want to have them overridden here. [1:03:25]

So that answers the question that we had from Dave Norman I believe.

Alright, Gerald Wolf: "In renovation work I would show the existing as a solid fill, but only the new as showing the construction type." Okay, so let's see how we would handle that. Let me create a - under Renovation Filter Options, let's take our planned status and let's duplicate this. I will give you the honor here. So Gerald, here is your planned status. Let's say that we want the existing elements to be overridden. So you are saying that you want to show the existing as a solid fill, but only the new as showing the construction type. [1:04:17]

So now, I haven't looked at what style is going to make the existing elements. I just know that in this style here, the new elements will show in their full detail, but the existing ones will be overridden. Let's see what that looks like. So now you can see the new elements are shown in full, the existing elements that remain are shown in a simple form. But maybe you want it to be a solid fill. So let's go in here and go to the override styles for existing elements. For the existing elements, we want to change their fill type, instead of being air space, let's give it 50%, and let's give that front color a little bit of a shade here, and I will say OK. [1:05:10]

And now we can see existing elements in the shade and the new elements here with everything being delineated. Iain Dykes has a similar comment. He writes, "Existing walls would routinely be shown simply say 25% and new walls as the chosen composite." So that the same request. This will solve the appearance issue with hatching, okay. So actually, Mark Phillips also says the same thing, "New construction all of the building materials to be lighter or just air space." Okay. And Dave Norman I think may be saying, "Thanks, overall excellent explanation of a confusing subject." You're welcome. [1:05:59]



Now there is this issue here with this diagonal, which is really maybe not what we want, and here we have this other wall meeting up in an odd way. If this wall, if I select this, perhaps I want to pull this back to there, so now it's just being added into this face there. That's something that I can do. But what about this intersection here? Maybe I want it to be just squared off, because it's not being cut in there. So there is an option, which may or may not work perfectly, but if we go to the renovation filter options when we are in this planned status here we can say 'Do Not Intersect'. [1:06:49]

Here is 'Solid Cut Fill'. So these are two things. Let's look first at this one. This says that in this variation where we are overriding the existing ones, maybe we don't want to have them intersect with other elements. Ah, okay, well that's a little odd. It's sort of clean here on the bottom one, but it's not showing properly there. Maybe we want to pull this into there. Now that's giving me perhaps something a little bit better result. So you may have to adjust some things. Let's look at what happens with the existing plan. [1:07:29]

We now get a little extra line, because this wall and this wall are actually overlapping. So we would want to take this demo wall back to here. Let me stretch it back to there. Now we have a clean result for the existing, and we go back to planned status, the variation, and that looks beautiful. So you may have to adjust it. Instead of trimming it off at the outside, I trimmed it off at the interior face there. So that hopefully resolves that question there. But 'Do Not Intersect' is an interesting one. Let's look at one other thing that we didn't look at which was 'Solid Cut Fill'. [1:08:17]

You notice when I check that, there was a slight difference here. Let me do 'Solid Cut Fill' here and see what that does. So that basically made it 100% instead of the 25%. So if you chose a light color maybe that would work. But perhaps we would get a similar effect or have more controls by saying what percentage fill we want here. Or we could say, "I don't want to override that." now here I have turned off the override, but let's go in here, and for this particular one, I want to do a solid cut fill and then say OK. [1:09:00]

And you can see now it's actually showing the line work in here, but putting a solid background in. so you can experiment and hopefully you will get something that is a good graphic that satisfies your needs. So some of those variations will help. Iain writes, "But I would do this with a wall type, not the filter." Okay, so I think what Iain is saying is that you may want to designate similar walls. Maybe you have existing walls that are brick and you have new walls that are brick, but you actually want to have them with a different wall type, even though they might be similar construction. [1:09:48]

You can designate them with a different wall type. We have done this in MasterTemplate as part of - I know we certainly did it in MasterTemplate in version 15 when there were fewer options for the overrides in order to be able to highlight certain things. So for example, if you wanted to highlight just the core of a wall - and this will be one final thing before we finish for today - if I right click on this wall





and say 'Edit Selected Composite', what we could possibly do is in this wood framing - and this is the wood framing here - I could make this a different skin instead of the wood framing. [1:10:34]

I am just going to make this insulation foam board. That has a rather different look. And I will say OK. And you can see that it made this interior have a particular fill. Now that's not what I was intending to demonstrate. Let's say this insulation here, if I did something with a solid, this again has something - I just want to pick something that has a solid fill here. I will just do asphalt. It's obviously not appropriate, but let's just say OK. [1:11:15]

And you can see that now this wall is designated in a way, even if we were to put this into the previous version of the planned status - well, actually now, since I don't have two wall types, we're getting them all designated that way here. But the idea is that you could create another wall type with perhaps some other graphic differentiation. And you can create in fact a building material in version 17 or just a simple fill in version 15 or 16 that would look different and would stand out. So that way you can actually reference the new elements in a different way than the existing. [1:11:59]

Okay, let's see if that answers that question from Iain. I think we have been going an hour and a quarter. I am going to finish up and go back in here and put this back to the way that it was. Instead of asphalt, we will put it back to wood frame plus insulation here. Now we have that set up. So in our next session, we'll be looking at some more of the tricky cases where renovation filter needs to be worked around or you need to understand how to work around limitations that are there. This includes modifying elements that are going to remain, but are going to change their state, like add some cladding to it. [1:12:55]

Or complex polygon forms like slabs or roofs that essentially are going to have holes cut out or are going to have extensions added on. Things like that. And we'll certainly be looking at your challenges. If you have been working with the renovation tool and have some things that you have been trying and want to see if there is a better way to do it, then send in your questions ahead of time or ask me during the session. So this concludes our lesson on the basics of renovation and remodel projects in ArchiCAD 15 and later. Please add your comments and questions to the page down below. This has been Eric Bobrow, thanks for watching.

[END OF AUDIO 1:13:41]