

# wxWidgets Installation Guide

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## Prerequisites

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- Visual Studio (2015-2022)
- Administrator access to modify environment variables
- Internet connection for downloading wxWidgets

## Important Notes

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! CRITICAL STEPS - READ CAREFULLY  
! - Match wxWidgets solution file with your Visual Studio version  
! - Restart device after setting environment variables  
! - Apply all property changes in Visual Studio  
! - Build ALL configurations (Debug/Release for both Win32/x64)

## Detailed Installation Steps

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### 1. Download and Extract

1. Download wxWidgets 3.2.6:
  - [Click to download wxWidgets-3.2.6.zip](#)
2. Extract to C:\Libraries
  - Final path should be: C:\Libraries\wxWidgets-3.2.6

### 2. Environment Setup

1. Set new environment variable:
  - Name: WXWIN
  - Value: C:\Libraries\wxWidgets-3.2.6
2. ! IMPORTANT: Restart your device for changes to take effect

### 3. Building wxWidgets

1. Navigate to solution folder:

C:\Libraries\wxWidgets-3.2.6\build\msw\

## 2. Select appropriate solution file:

Visual Studio Version	Solution File
VS 2022	wx_vc17.sln
VS 2019	wx_vc16.sln
VS 2017	wx_vc15.sln
VS 2015	wx_vc14.sln

## 3. Build Configurations (in order):

- i. Win32 Debug
- ii. Win32 Release
- iii. x64 Debug
- iv. x64 Release



### Build Results

- Win32 builds → vc\_lib folder
- x64 builds → vc\_x64\_lib folder
- Debug files end with 'd' (e.g., wxbase32ud.lib)
- Release files have no suffix (e.g., wxbase32u.lib)

## 4. Project Setup

### 1. Create New Project:

- File → New → Project
- Select "Empty Project"
- Name your project

### 2. Add Test Source:

- Create main.cpp in "Source Files"
- Add test code:

```
#include <wx/wx.h>
```

```
class App : public wxApp {  
public:
```

```

bool OnInit() {
    wxFrame* window = new wxFrame(NULL, wxID_ANY, "GUI Test",
        wxDefaultPosition, wxSize(600, 400));
    wxBoxSizer* sizer = new wxBoxSizer(wxHORIZONTAL);
    wxStaticText* text = new wxStaticText(window, wxID_ANY,
        "Well Done!\nEverything seems to be working",
        wxDefaultPosition, wxDefaultSize, wxALIGN_CENTRE_HORIZONTAL);
    text->SetFont(wxFont(20, wxFONTFAMILY_DEFAULT,
        wxFONTSTYLE_NORMAL, wxFONTWEIGHT_NORMAL));
    sizer->Add(text, 1, wxALIGN_CENTER);
    window->SetSizer(sizer);
    window->Show();
    return true;
}

};

wxIMPLEMENT_APP(App);

```

## 5. Configure Project Properties

### 1. General Settings:

- Right-click project → Properties
- Set "All Configurations" and "All Platforms"

### 2. Include Directories:

- C/C++ → Additional Include Directories
- Add both:

```

$(WXWIN)\include
$(WXWIN)\include\msvc

```

### 3. System Configuration:

- Linker → System
- Set: Windows(/SUBSYSTEM:WINDOWS)

### 4. Platform-Specific Settings:

#### For Win32:

- Platform: Win32
- Linker → General → Additional Library Directories:

```
$(WXWIN)\lib\vc_lib
```

#### For x64:

- Platform: x64
- Linker → General → Additional Library Directories:

```
$(WXWIN)\lib\vc_x64_lib
```

! REMEMBER: Apply changes after each property modification

## 6. Testing Installation

1. Switch to Debug configuration
2. Build and Run (F5)
3. Verification:
  - A window should appear
  - Message: "Well Done! Everything seems to be working"

## Troubleshooting

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### Common Issues

1. Build Errors:
  - Verify Visual Studio version matches solution file
  - Ensure all configurations are built
  - Check environment variable is set correctly
2. Linker Errors:
  - Confirm library directories match platform (Win32/x64)
  - Verify debug/release configuration matches libraries
3. Runtime Errors:
  - Check subsystem setting
  - Verify all DLLs are present

## Tips

- Always build both Debug and Release configurations
- Double-check platform-specific settings
- Apply property changes before building
- Restart Visual Studio if changes don't take effect

## Additional Resources

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- wxWidgets Documentation: <https://docs.wxwidgets.org/>
- Community Forums: <https://forums.wxwidgets.org/>
- GitHub Repository: <https://github.com/wxWidgets/wxWidgets>

## Video Tutorials

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- **C++ GUI Programming For Beginners**
  - Episode 1 - Installing wxWidgets
  - Link: [Watch on YouTube](#)
  - Channel: Kamarton Academy
  - Perfect for beginners following this installation guide