

## SparseLib and c++

**Source:** <http://sci.tech-archive.net/Archive/sci.math.num-analysis/2004-12/0102.html>

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**From:** Joe C ([cj5815\\_at\\_yahoo.com](mailto:cj5815_at_yahoo.com))

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Can someone tell me how to use SparseLib with the cygwin c++ compiler?

I installed the libraries using the make file as instructed by the readme files.  
I include the references to the header files (see program below)

When I try to try to compile the programs it does not work?

Am I referencing the library correctly?

Does anyone have an sample code I code look at?

Below is program I am using and the error I am getting.

Thanks.

Joe

```
#include <iostream>
```

```
#include <stdlib.h>
```

```
#include "compcol_double.h"
```

```
#include "comprow_double.h"
```

```
#include "coord_double.h"
```

```
#include "iohb_double.h"
```

```
using namespace std;
```

```
int main()
```

```
double tot = 1.e-6;
```

```
int result, maxit = 160;
```

```
double val[12] = {1.0, 2.0, 3.0, 4.0, 5.0, 6.0,  
                 7.0, 8.0, 9.0, 10.0, 11.0, 12.0};  
int colind[12] = {0, 1, 4, 0, 1, 2, 1, 2, 4, 3, 0, 4};  
int rowptr[6] = { 0, 3, 6, 9,10, 12};  
double rowsum[5] = {6.0, 15.0, 24.0, 10.0, 23.0};  
double colsum[5] = {16.0, 14.0, 14.0, 10.0, 24.0};
```

```
CompRow_Mat_double R(5,5,12,val,rowptr,colind);
```

```
return 0;
```

```
}
```

```
> $ g++ testSparse.cpp -o testSparse.exe
```

```
testSparse.cpp:4:28: compcol_double.h: No such file or directory
```

```
testSparse.cpp:5:28: comprow_double.h: No such file or directory
```

```
testSparse.cpp:6:26: coord_double.h: No such file or directory
```

```
testSparse.cpp:7:25: iohb_double.h: No such file or directory
```

```
testSparse.cpp: In function `int main()':
```

```
testSparse.cpp:14: error: parse error before `double'
```

```
testSparse.cpp:26: error: 'CompRow_Mat_double' is used as a type, but is not  
defined as a type.
```

```
testSparse.cpp:40: error: parse error before `return'
```