# Information to Assist in the Choice of Window Blinds for New Schools Follow-Up Report

February 6, 2007

by Enviro-Health Consulting for The Nova Scotia Department of Education, Facilities Planning Division

Enviro-Health Consulting Ltd.

13 Tremont Drive Halifax, NS B3M 1X8 902-457-3002 envirohealth@ns.sympatico.ca

# Information to Assist in the Choice of Window Blinds for New Schools: Follow-Up Report February 6, 2007

New findings and conclusions can be found at the end of this report. This report is combined with the earlier Information to Assist in the Choice of Window Blinds for New Schools, January 30, 2007.

There have been reports of some blinds in new schools not performing well. Consequently, Enviro-Health Consulting was asked to assess and comment on the proposed blinds for Citadel High School.

It is important to have blinds in schools that have several features:
Ability to darken room
Help to control heat gain in sunny classrooms
Limited/no off gassing
Easy to operate
Durable

## January 30th Findings:

Gerald Muise and Karen Robinson of Enviro-Health Consulting visited St. Stephen's Elementary, Oxford Street School (elementary and Junior High) and Prince Andrew High School which have had Sun Project's Moduline #85 for about a year. We visited Halifax West High School to view their Silent Gliss blinds which have been in use since the school opened four years ago. Photos in the Appendix.

#### Sun Project Moduline #85 blinds

- All glided with little resistance,
- were easily raised and lowered with one hand, either using the chain or by pulling down on the cross piece,
- glided quietly,
- maintained their position and did not creep.
- Chains were long enough.
- All classrooms had room-darkening blinds by choice.
- Blinds did not gas off when newly installed. Product information says "No PVCs, no VOCs".
- There have been no complaints at all to date. Staff, including teachers and custodians, all had only positive things to say about the Sun Project blinds and the service they received.

The Silent Gliss blinds at Halifax West also did not gas off when new, but they have definitely not worked well. Complaints began soon after the school opened.

- The mechanism seems hardier but that may be contributing to the problem. It requires a lot of force to pull the chains to move the blinds.
- In every blind we tried, the mechanism ground noisily.
- All the chains we saw were too short, requiring 2 hands because there is so little length available and because of the strength needed to pull the chains.
- Some blinds don't stay up. Some creep down and others slam down.
- Chains break.

- Chain-stop balls are not working contributing to jamming.
- Some are jammed part way.
- Some can't be raised.

منډ

- Staff and administration are frustrated that many blinds are still not fixed, (23 currently) and that those that get fixed do not stay fixed.
- They report poor service, which is confirmed by our attempts at contact. Repeated calls to the company by Gerald and VP Lynn Moulton in the past four weeks support the principal's assertion that he has had little satisfaction in getting the problem fixed by the company for the past 3 years.
- The company reps are said to be blaming students for mistreating blinds. However, both blinds in the staff room at Halifax West were broken, and in two VP offices and the principal's office. Also, every teacher we interviewed in all four schools said students do not use the blinds.

Complaints about the blinds have begun at the new Sir John A. Macdonald High School, although we did not visit that school today. One teacher pulled a blind off the wall. Teachers with sunny classrooms at both Sir John A and Halifax West have mentioned without any prompting that the mesh shades don't keep their rooms from overheating. Teachers with solid blinds had no complaints about heat transfer.

#### Recommendations from January 30th:

We believe we have sufficient information to make recommendations. These Silent Gliss blinds are not working as well as expected and service has not been adequate. Unless further improvements are made to these Silent Gliss blinds we can not recommend their use in schools.

We recommend the Sun Project Moduline #85 blinds as they appear to work well in schools. Claims in the product information appear to be accurate: "Lite-lift provides a smooth, constant, effortless lift of medium to large shades with finger tip control...mechanism effortless lift alleviates stress on the chain and avoids chain breakage...shade mechanism can not be stripped or damaged...Durable - Heavy use design, important in the commercial market where products are in some cases abused."

We also recommend putting solid, room darkening blinds in classrooms. It was obvious in each school that room darkening blinds were preferred for classrooms instead of mesh because they give options and flexibility for teaching needs. Mesh had been chosen for some offices.

February 6th Findings:

Gerald Muise and Karen Robinson of Enviro-Health Consulting visited Kingswood Elementary and Sir John A Macdonald High School to add further information to the blinds discussion. The blinds at Sir John A are Sun Project DEKO and at Kingswood, Sun Project Moduline but with no identifying number. For photos see the Appendix.

### Sun project Moduline blinds at Kingswood Elementary:

- All rooms had mesh blinds installed when the school was built (It opened a year ago.)
- Some were fixed during the deficiencies process as would be expected.
- As with all blinds examined to date, this model had a protective chamber for the roller mechanism, and end caps.
- These blinds have a self-cleaning feature we did not notice on the previous Moduline blinds, but it may

have been there. However, on several blinds the self-cleaning strip was working its way out with use. See photos.

- Blinds glided quietly and with little resistance.
- They were easily raised and lowered with one hand, either using the chain or by pulling down on the cross piece.
- All that we tested maintained their position and did not creep.
- Chains were long enough.
- The staff room and one classroom we noticed (there are possibly others) had chain guides fastened to the lower window trim. Most chains were not riding in the guides as the chains appeared to have stretched. The blinds were working well though.
- A few of the blinds we tested would occasionally go up crooked and would bind, but would self-correct if they were lowered and raised a second time.
- In the cafeteria, three need repair: one is missing protective chamber across the top and also does not raise and lower properly. See photo. One end-cap was breaking away. One has a side drooping and will need to be re-fastened to the wall.
- Staff on the dark side of the building said mesh blinds are working fine. The principal and teachers we interviewed said rooms that get strong sun get hot and it is "not ideally dark enough for LCD projector use." One teacher said they watched a video today and the room wasn't dark enough. One said she can't see the computer screen well when it is sunny and the blinds are down. Several said the mesh blinds were better than the old curtains or no shades at all in their old schools.
- The principal, custodian and staff we interviewed said other than a few that were fixed last year during warranty and the cafeteria ones needing it now, they have been working fine. They had no complaints about the blinds, only about the windows not working well.

#### Sun Project DEKO blinds at Sir John A. Macdonald High School:

- All rooms had mesh blinds installed when the school was built.
- This DEKO version has no protective casing along the top of the blind and no end caps. Rollers are exposed.
- Not self-cleaning
- The mechanism does not seem to be of the same quality as at Kingswood.
- There are plastic balls on the chains, and they are easily tampered with and removed. (All other blinds we examined in other schools had metal balls to position the chains.)
- Most blinds worked well, but some were prone to going up crooked and not self-correcting.
- Most glided quietly and with little resistance with one hand, either using the chain or by pulling down on the cross piece.
- All that we tested did not creep.
- Chains were long enough.
- It is early in the warranty period and there can be expected to be a few needing warranty attention, however these blinds were causing complaints. Plastic balls come off the chains and chains are easily tampered with. The principal said several crossbars at the bottom have been pulled off. He said that four teachers have complained the mesh does not darken the rooms enough for certain class activities, especially in direct sun. (Visual arts and science) Also, that sunny classrooms get hot with the blinds down. The office room without an openable window gets very hot with the blinds down on a sunny day.
- The custodian noted that the blinds are fastened only to gyproc and some have been pulled off the wall. Others he noticed were loose and he had them re-fastened. A science teacher also mentioned this problem in his room.
- This is the only school where we determined students have been misusing blinds, but it was in an

unsupervised mezzanine where several cross bars have been removed or almost removed, and some small plastic balls are removed from the pull chains. Also, a few chains had been broken in the cafeteria.

We were unable to get product manuals or other product information from Kingswood or Sir John A. We found "Sun Project Moduline" and "Sun Project DEKA" on the cross bars of the blinds respectively. The Moduline blinds installed at Kingswood may or may not be the same as the Moduline #85s installed by the Board at Oxford, PA and St Stephens. The markings on the cross bars on all of these read "Moduline" with no number. The Board provided us with the number and product information from their supplier.

#### **Overall Recommendations:**

40

These Silent Gliss blinds are not working as well as expected and service has not been adequate. Unless further improvements are made to these Silent Gliss blinds we can not recommend their use in schools.

The Sun Project DEKA blinds appear to be of inferior quality to the Sun Project Moduline blinds. Problems being reported at Sir John A. appear to be more varied and numerous. However, some have to do with installation into gyproc rather than being a problem with the blind itself.

We recommend the Sun Project Moduline #85 blinds as they appear to work well in schools. Claims in the product information appear to be accurate: "Lite-lift provides a smooth, constant, effortless lift of medium to large shades with finger tip control...mechanism effortless lift alleviates stress on the chain and avoids chain breakage...shade mechanism can not be stripped or damaged...Durable - Heavy use design, important in the commercial market where products are in some cases abused."

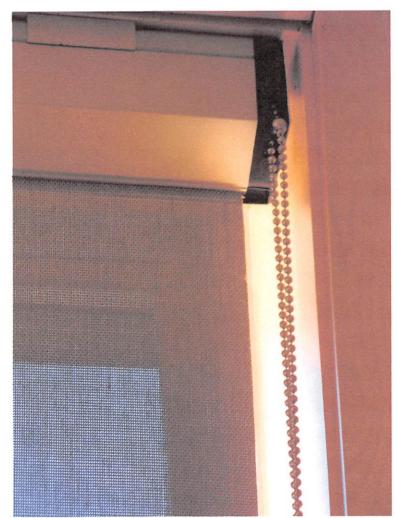
We also recommend putting solid, room darkening blinds in classrooms. It was clear in each school that room darkening blinds were preferred for classrooms instead of mesh because they give options and flexibility for teaching needs. All schools with mesh blinds reported rooms with direct sun get too warm.

If you would like further evaluation, we would be pleased to do so.

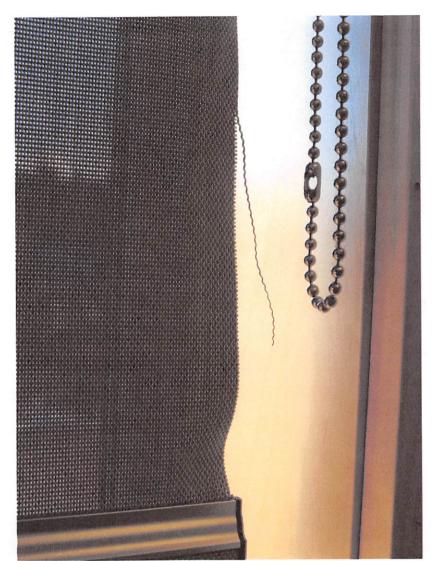
Karen Robinson Enviro-Health Consulting



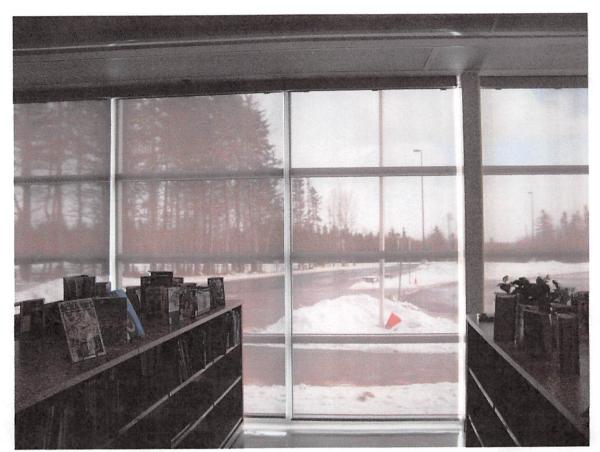
Moduline #85, Prince Andrew High School



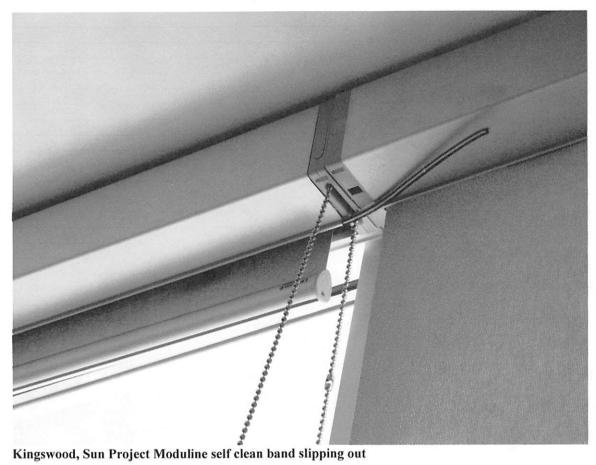
Halifax West High, Silent Gliss Blinds

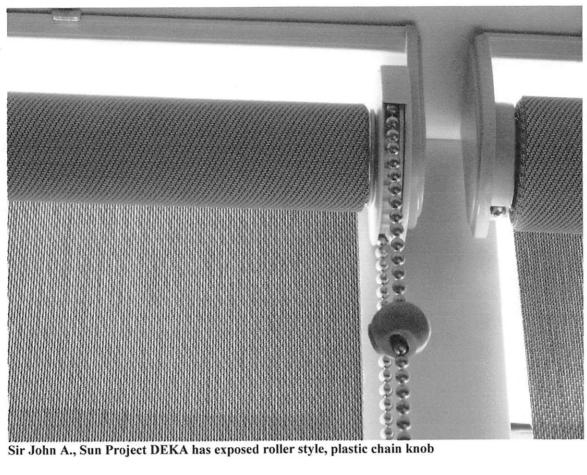


Halifax West High School, Silent Gliss



Kingswood, mesh partly darkens rooms







Sir John A., Sun Project DEKA roller binding up



Sir John A., Sun Project DEKA bar coming off



Sir John A. blind support screw in gyproc