

MINUTES OF THE FOURTH BUILDING SUB-COUNCIL MEETING OF 2019

DATE: September 12, 2019

TIME: 8:36 a.m. to 1:48 p.m.

LOCATION: Safety Codes Council Office, Edmonton

PRESENT: <u>Sub-Council Members</u>

Andy Smith, Chair

Russell Croome, Vice Chair North

David Flanagan Keith Jansen Robert Kralka Matthew Kramer Lee Phillips

Ken Roskell Darin Sceviour Ulrik Seward

Safety Codes Council

Allison Karch, Kathryn Derkach, Kris Schmaltz

Brian Alford (President/CEO), Kevin Griffiths (Council Chair)

Alberta Municipal Affairs

Paul Chang, Lance Leger

Guests

Karen Muir (BFSC Liaison), Gerry Wiles (ESC Liaison), Chris Taylor (FSC Liaison),

REGRETS: Greg Beck, Colin Belliveau, Rick Gratton, Stephen Hill, Corey Klimchuk,

Bruce Schultz (Vice Chair South)

RECORDER: Sandi Orr

2019 MEETINGS: November 7

1. Meeting Opening

The Chair called the meeting to order at 8:36 a.m.

After the morning break, Brian Alford (President/CEO) and Kevin Griffin (Board Chair) were welcomed to the meeting and a round table introduction was held. The Chairman of the Board emphasized the importance of all of the sub-councils and the work they do.

1.1. Agenda Adoption

Russell Croome / Ken Roskell moved that the agenda be adopted as circulated, with a flexible order of business; CARRIED

1.2. Adoption of May 9, 2019 Minutes

Ulrik Seward / David Flanagan moved to adopt the minutes of the May 9, 2019 meeting, as circulated; CARRIED

2. Matters for Decision

2.1. Vice Chair Election

The floor was opened for nominations for Vice Chair. Bruce Schultz and Russell Croome were nominated. After three calls and no further nominations, Bruce Schultz and Russell Croome were appointed as Vice Chairs of the Building Sub-Council, by acclamation, for a two-year term.

2.2. Matrix Review – review existing sub-council matrix to ensure it continues to appropriately represent the building discipline (end of meeting)

An in camera session was held to review the existing sub-council matrix.

Keith Jansen / David Flanagan moved that the Building Sub-Council has conducted their review and no changes are being recommended to the current Building Sub-Council matrix at this time; CARRIED

It was suggested that a seat pertaining to energy efficiency codes may be beneficial in the future. Further research on potential nominating organizations for energy efficiency experts will be conducted.

It was recognized that experts can be invited to sub-council meetings at any time when the need arises.

2.2.1. Development of Skills Matrix

It was reported that skills matrices are being developed for each sub-council to assist nominating organizations to find nominees with the right skills and experience.

Each sub-council member was asked to define a few skills and/or qualifications for their own position that would be essential for their work on the sub-council and to forward this to the Council by October 21, 2019. [All]

2.3. Nomination of Terrance O'Flaherty to represent the Mechanical Contractors industry segment for a term ending January 31, 2023, effective February 1, 2020

The nomination was included in the portal and reviewed.

Russell Croome / Ken Roskell moved to recommend to the Board the appointment of Terrance O'Flaherty to the Building Sub-Council to represent the Mechanical Contractors industry segment for a term ending January 31, 2023, effective February 1, 2020; CARRIED

2.4. Draft Terms of Reference – Joint BSC/EVSC Working Group on Using Stopped Escalators

The draft Terms of Reference for the Joint Building and Elevators Sub-Councils Working Group on Using Stopped Escalators was included in the portal and reviewed. It was suggested that representation be considered from OH&S and it was clarified that they would have similar interests as fire services. It was suggested that if their expertise is needed, a representative could be invited as a guest.

Lee Phillips / Ulrik Seward moved to approve the Terms of Reference for the Joint Building and Elevators Sub-Councils Working Group on Using Stopped Escalators, as circulated; CARRIED

3. Review Matters Arising/Action List

	Item	Description	Action	Responsible	Date	Priority	Status / Update
					Initiated		
1.	Stacked	Working group to consider		Working	Jan	High	With AMA
	Townhome	developing a code change		Group	25/18		
	Working Group	proposal re: 9.10.14 and					
		9.10.15, AMA does not					
		support the existing					
		wording for a STANDATA					

	Item	Description	Action	Responsible	Date Initiated	Priority	Status / Update
		It was suggested numerous revisions to the STANDATA are needed; and it was recommended that the WG consider separating the issues in the original proposal to simplify.	STANDATA	Working Group	Mar 15/18		
2.	Off Site Review Clarification re: Pre- manufactured Structures	Development of an Information Bulletin on pre-manufactured structures.	Info Bulletin	Chang	Sep 3/15	High	With AMA
3.	Professional & Constructor Responsibilities / Letters of Assurance?	AMA, APEGA, AAA and Council meet regularly on this topic and will provide updates to BSC; will be meeting every 2 weeks	Review w/ AMA, APEGA and AAA	Orr/Smith/ Beck		High	Feedback from AMA/AAA/APEGA is expected at the next meeting
4.	Engineering Judgements for Fire Stop System	Consideration of the publication of a STANDATA based on the report provided to AMA; draft reviewed by BSC	STANDATA	Chang	Sep 3/15	Mid	With AMA
5.	Window Safety Code Change Proposal	Update on progress of proposal and suggestions to address issue in existing homes		Schultz	Sep 28/17	High	Proposed change included in the public review of the 2020 NBC; remove from action list
6.	Elevator Permits – FEO Upgrades	Building, Fire, Elevator and Electrical Administrators are discussing a joint STANDATA to require a Building permit or at least a flag to the Building discipline	STANDATA	Chang	Nov 16/17	Mid	With AMA
7.	14 BCI Residential Children's Homes	Draft supported by BSC April 2018	STANDATA	Chang			With AMA
8.	14-BCV-007 Interior Stairways for Roof Access	BSC requests that AMA consider revisiting this STANDATA to take into consideration AEDARSA and OHS requirements.	Revisit published STANDATA	Chang	Mar 21/19		With AMA; full discussion expected at November 2019 mtg

	Item	Description	Action	Responsible	Date Initiated	Priority	Status / Update
9.	Fire Protected Joists	The Director of Codes and Standards will ensure this item is also added to the next PTPACC meeting agenda. UPDATE: Reduction of trade barriers has been the focus; doesn't seem to be an issue in other provinces. Being reviewed by NRC and CCCME. Nothing anticipated for 2020 Codes.		Orr	Sep 27/18	Mid	Code change on this topic not expected in 2020 NBC
10.	Requirements of Engineering Letter for	Greg Beck will bring this issue back to AAA.		Beck	Sep 27/18	High	Ongoing
	Accepting Material or System Not in Code	Mag Board SIP issue propagated this issue. Applicable to other proprietary products as well. UPDATE: Believe complaints have been made to APEGA regarding failures; the Provincial Building Administrator will bring forward any further information. APEGA has a Standard of Practice for Product Authentication and have published a document for clarification. Product could be accepted as alternate solution if signed off by a professional. The related Council Policy is being revised as a result of this new information.		Chang	Jan 17/19		This item was removed from the action list. A new item will be added to the next meeting to review a recent Info Bulletin about variances and a Gas Code variance about engineer authentication.
11.	Permit Requirements for Refrigeration Systems	Request that AMA consider drafting a STANDATA to clarify permitting requirements for refrigeration systems. A multi-discipline Information Bulletin STANDATA is being worked on.	STANDATA	Chang	Nov 8/18	Low	Under review by AMA in consultation with HVAC-R industry group

	Item	Description	Action	Responsible	Date Initiated	Priority	Status / Update
12.	Structural Design of Residential Buildings re. STANDATA 14- BCV-016	Consider the proposed revisions to STANDATA 14-BCV-06 Manufactured Structural Components in the Construction of Oneand Two-Family Dwellings.	STANDATA	Chang	Nov 8/18	High	Updating STANDATA reflect new code; in progress
13.	Draft FAQ on Flashing	BSC reviewed and suggested it be presented as and Information Bulletin rather than FAQ.	Info Bulletin	Chang	Nov 8/18	Low	Under review by AMA & volunteers
14.	Tiny Homes	The Administrator will looking into what type of certification is available or being considered.		Chang	May 9/19		Presented at last meeting, remove from action list
		The subject will be brought forward at the conference to see if SCOs are encountering many tiny homes.		Chang	May 9/19		Completed, remove from action list
		Continued follow-up as needed/available. UPDATE: Some municipalities are looking at difference variables for Tiny Homes. Municipal Affairs is not looking at publishing any province-wide variances and will leave this up to the municipalities. This could be brought back in the future to look at common denominators. AMA has been having discussion regarding those being built as RVs.		All	May 9/19		Leave on action list for follow up
15.	Depressurization STANDATA – path forward without cfm number	Bring this issue back to BILD to determine whether an industry group would be willing to take this on this work.		Jansen	May 9/19		Still being researched

4. Matters for Discussion

4.1. SCO Competency Profile Project Update

Kris Schmaltz was welcomed to the meeting and reported on a project that is underway to create a Competency Profile for SCOs. These profiles will be used to determine educational requirements and potential continuing educational opportunities. The Council is engaging with SCOs across all four construction disciplines to determine common competencies. A group of volunteers has begun work and an initial report is being reviewed to determine a gap analysis. Discipline specific competencies will also be determined in the future.

It was questioned where Barrier Free fits in and it was suggested members of the sub-council could be consulted through the process. It was questioned were Energy Codes fit in, and it was clarified that the focus is on competencies rather than technical aspects.

4.2. Building Anchorage – box ladder (9.23.6.1.2.c) /sill plate (9.23.6.1.3)

A document was included in the portal, outlining box ladder (9.23.6.1.2.c) /sill plate (9.23.6.1.3) code requirements in relation to proposed 2020 changes. 9.23.6.1.2.c describes a box ladder which is commonly used in Alberta. This is an Alberta specific Code article. 9.23.6.1.3 describes alternate anchorage but describes a traditional sill plate. This was brought forward as information and further discussion was deferred to the next meeting.

9.23.6.1.(2) was viewed on screen. It was suggested that clarification be requested on the reason for the changes between the 2010 and the 2015 code requirements. The Administrator will review this relative to harmonizing with the NBC and will report back to the BSC. [Chang]

4.3. Electromagnetic Lock Release in Care Facilities (STANDATA 14-BCV-011)

The following documentation was included in the portal for review:

- Existing STANDATA 14-BCV-01-14-FCB-012 Door Release Hardware
- Background information
- Interpretation Guide from September 2018 meeting
- NRC's response to the request for interpretation for Door Release Hardware

After conducting further research, it was reported that not all devices require a pull station. The STANDATA clarifies that Electromagnetic Lock Releases are allowed in Care Facilities and no changes are being considered for the STANDATA at this time.

Russell Croome and Bruce Schultz will review the addition information provided and will bring back any concerns at the next meeting.

[Croome / Schultz]

4.4. Venting for Fire Fighting

AMAs interpretation is that doors cannot be identified as the required venting for fire fighting. Alternate solutions could be accepted by municipal building and fire services. It was clarified that windows in suites are permitted with conditions and the code appendices provides additional information.

The Administrator reported that it is believed that if the local fire service has a plan for the entire building and it meets the intent of the code, an alternate solution could be considered by the authority having jurisdiction.

4.5. 2020 Meeting Dates – provide input on proposed dates; align with code review timing

The tentative meeting dates are:

- Thursday, January 16, 2020
- Thursday, March 19, 2020
- Thursday, May 14, 2020
- Thursday, September 17, 2020
- Thursday, November 5, 2020

Final meeting dates will be confirmed at the November meeting.

All meetings will be at the Council office, starting at 8:30 a.m. Additional meetings can be added as necessary for times when there is a heavier workload.

4.6. Liaison Reports

4.6.1. Fire Sub-Council

The following topics were discussed at the May meeting:

- A presentation was made from ABSA regarding rinks and ammonia refrigeration plants
- Breweries and Distilleries Working Group
- Issues regarding safe egress to a public thoroughfare
- Data on variances was requested to identify common issues that could be brought to the sub-council for consideration of a code change or province-wide variance
- Escape rooms when the layouts change

Additional information is included in the Fire Sub-Council Report from Corey Klimchuk, as well as the Sub-Council Q2 Report from all sub-councils.

4.6.2. Barrier Free Sub-Council

The following report was provided:

- The Barrier Free Design Guide is now available on the Safety Codes Council website free of charge
- The Sub-Council Q2 Report is a great summary of the discussions
- There is nothing under discussion that would require the BSC to take action on at this time

There is concern about the lack of awareness for the Barrier Free Design Guide and the barrier free requirements during the design and development stages. Members were asked to let the BFSC know about common gaps they see.

4.6.3. Electrical Sub-Council

It was reported that any common issues will be brought forward as needed. The liaison will bring the topic of distilleries to the Electrical Sub-Council as electrical area classifications may be needed.

4.7. Working Group Reports

4.7.1. Occupant Load

There have not been any meetings since the last Building Sub-Council meeting.

4.7.2. Breweries and Distilleries

The Working Group's report was included in the portal as information.

The Working Group settled on 3 deliverables/recommendations and feedback was sought from the Building Sub-Council:

- Short term goal—industry guide to be developed which walks prospective distillers through all the steps of starting up a distillery. Building code and fire code compliance is just one small part of the process, but an important and potentially costly one.
- Medium term goal—develop a proposal for a STANDATA interpretation, bulletin or guideline which outlines the building and fire code requirements for distilleries, and points out the implications of those code requirements. It would also potentially propose a specific method of alternative solution – using the 'Dow Fire & Explosion Index' method of risk indexing.
- Long term goal—industry leads proposed changes to the NBC to better address craft distilleries

A presentation was provided to the Working Group from an Architect that specializes in the design of these types of facilities. Highlights of that presentation included the following:

- In the US, a high hazard industrial occupancy can be in the same building as an assembly occupancy, however a 2-hour fire barrier is required
- If dust is thicker than a credit card, it is a hazard
- Pressure relief valve and 'Lyne arm' connecting parts of still together have the highest alcohol vapour concentration and are the highest hazard areas in a distillery—worst case hazard is a still breach
- Hazard level is related to the concentration of alcohol in each part of the still, and the distillation rate
- Alcohol spills and barrel storage are considered low risk
- Used stills can be a major hazard because the copper in a still is sacrificial and can wear out
- Plastic totes are often used as spirit receivers and this does not comply with AFC

Some coordination issues with AGLC and the commercial real estate industry were identified:

- When distillers call AGLC for information, AGLC tells them that they must have a space leased before they will give them information. AGLC should direct customers to the Alberta Craft Distillers Association first so the customer can get the overall big picture story.
- It was reported that the commercial real estate industry is not well educated on the risks of distilleries and they may unknowingly offer leases to distillers in unsuitable space.

The Working Group has offered to write content for a proposed STANDATA that the Sub-Councils and AMA can consider for final publication. The NBC(AE) 2019 and NFC(AE) 2019 were reviewed and there do not appear to be any significant changes to the distillery requirements.

During the last meeting, a discussion was held regarding the production of Ready to Drink beverages and whether they fall under the definition of a distillery. Further discussion is being held in that regard. More discussion was held regarding the 'Dow Fire & Explosion Index' method of risk indexing that could be used to benchmark a risk index.

Two additional meetings are planned prior to the November 2019 BSC and FSC meetings, where recommendations will be brought forward. Additional feedback was provided for consideration including the level of risk indexing, pressure equipment, venting, etc. It is believed there is definitely a need for additional education.

It was questioned if other provinces are looking at this, but little information has been found. Further discussion was held about the Dow Fire & Explosion Index and additional information is needed to fully understand the process.

Feedback was requested for the three deliverables proposed by the Working Group. It was suggested that a STANDATA may not be a reasonable solution and a better approach may be to approach the AHJs. All information will be shared with AMA. [Seward]

4.8. Administrator/AMA Report

The Administrator provided the following report:

- There are no regional meetings being scheduled or currently planned. AMA will be working with associations and other stakeholders regarding presentations to industry, SCOs. AMA will be promoting attendance to the various association meetings such as the Alberta Building Officials Association (ABOA), Alberta Mechanical Officials Society (AMOS), and BILD Alberta etc.
- AMA recently presented to the Glass Trades Association of Alberta (Northern), including NECB 2017 Fenestration/Building Envelope
- AMA's Energy Codes Specialist will be presenting at the CIPHEX show held in Calgary during the month of November, as well as Construction Specifications Canada.
- As of August 2019, the Building Discipline Technical Advisors (Duty Officers) have dealt with approximate 2,500 telephone inquiries that have gone through the Communication Inquiry Center. Not all phone calls are currently in the statistics, and emails are not tracked at this time for statistics. AMA hopes to have a database system implemented in the future for assisting with improving corresponding to inquiries that come through to the Duty Officers for both phone calls and emails.
- Part 9 of the Code Update information three-column document have been circulated, the Safety Codes Council was thanked for uploading on their site. Part 3, 5 and 7 Code Update Information three-column documents were just provided to the City of Calgary and City of Edmonton for review.
- The task of reviewing and updating current STANDATAs is now in progress. This includes Joint Cross discipline STANDATAs. Currently there are 48 existing STANDATAs being reviewed by the Building Discipline, 21 Variances, 20 Interpretations and 7 Bulletins. The recommendations from the Building Sub-Council for some of the existing STANDATAs will be addressed as well during this process.
- Fillable PDF format of Professional Schedules from the National Building Code 2019
 Alberta Edition have been circulated and available on AAA, APEGA, SCC and AMA websites.
- The Building Administrator will be working in conjunction with the Council's Appeal Staff to identify the roles and responsibilities of the Technical Advisor in relation to the Appeal Hearings and the Appeal Panel. This is just in the preliminary stage and will include senior personnel and other Technical Administrators once some criteria is drafted. Additionally, the Building Administrator is supportive of the Building Technical Advisors attending the Appeals Training 101 to provide the Technical Advisors a better understanding of the appeal hearing process.
- The Building Administrator will attend the ABOA 2019 conference at the invitation of the ABOA Executive and provide a presentation and Q&A on September 18, 2019
- The Building Discipline at AMA attended two appeal hearings to date and there are two more on the schedule for September/October.
- The Building Administrator had requests to review five orders to date.

4.8.1. SLALA and PDD Update

There was nothing new to report.

4.8.2. Code Cycle Planning

It was questioned whether any additional sub-council meetings are needed relative to the public review. Code review of the public review documents issued by NRC will be added to the agenda for the November meeting. Once the 2020 NBC is published, work will continue to publish the National Building Code—Alberta Edition. The Alberta Edition will become in force one year after being published. An Authority Having Jurisdiction can accept an alternate solution should the owner or designer wish to use the new code that has been published but is not yet in force. It was suggested that clear and timely communication is needed regarding the code adoption process so that owners, industry, designers and regulators are all of the same understanding.

A brief discussion was held regarding Alberta specific requirements. Members were encouraged to bring forward any Alberta-specific items that they would like to propose as changes to the NBC in the future.

A group of members will review the public review documents in preparation for the November meeting.

4.9. Council Updates

The following report was included in the portal:

- The Barrier Free Design Guide is now available on the Council website, free of charge at (http://www.safetycodes.ab.ca/Public/Documents/Barrier-Free-Design-Guide WEB-Aug2019.pdf)
- The Council is offering Member training:
 - New Member Orientation September 24
 - Effective Meetings Workshop November 12
 - Appeals Training November 13
 - To sign up, please email Gerry.Letendre@safetycodes.ab.ca
- Members were asked to bring forward any communication challenges experienced between SCOs and professionals registered by APEGA or AAA
- All Members are required to complete online FOIP training by December 31, 2019 –
 please contact Council Administration if you did not receive the email with the link to the
 training
- BSC's recommendation of November 2017 to add a Large Industrial Developments seat with the Association of Accredited Corporations of Alberta as the nominating organization is now being looked at by the Board
- Work continues on the governance review, including proposed changes to streamline working group formation and processes

- Working group chairs will now be asked to provide a short written report in advance of each sub-council meeting and sample templates are available
- The Council has created a 'subcouncils@safetycodes.ab.ca' email for all meeting invites;
 sub-council members were asked to continue to use direct emails for inquiries
- A member survey was sent to all sub-council members, this is still open and members were asked to fill out the survey and provide their honest feedback
- A quarterly report of all sub-councils' key activities has been created and will be distributed to the Board and each sub-council at the end of each quarter
- Industry association meetings will be used to replace regional meetings for SCOs in construction disciplines

5. Other Business and Meeting Finalization

5.1. Round Table

It was suggested that discussion is needed for a code harmonization meeting in the future.

The NECB semi-heated buildings table including additional Alberta municipalities will be added to the website.

The NECB checklist was just received from NRCAN.

5.2. Next Meeting

The next meeting was reconfirmed for November 7, 2019 at 8:30 a.m.

5.3. Meeting Adjournment

Russell Croome / Ken Roskell moved that the meeting be adjourned; CARRIED

The meeting was adjourned at 1:48 p.m.

NEW ACTION ITEMS FROM TODAY'S MEETING -

2.2. Matrix Review – review existing sub-council matrix to ensure it continues to appropriately represent the building discipline (end of meeting)

It was suggested that a seat pertaining to energy efficiency codes may be beneficial in the future. Further research on potential nominating organizations for energy efficiency experts will be conducted.

2.2.1. Development of Skills Matrix

Each sub-council member was asked to define a few skills and/or qualifications for their own position that would be essential for their work on the sub-council and to forward this to the Council by October 21, 2019. [All]

4.2. Building Anchorage – box ladder (9.23.6.1.2.c) /sill plate (9.23.6.1.3)

The Administrator will review this relative to harmonizing with the NBC and will report back to the BSC. [Chang]

4.3. Electromagnetic Lock Release in Care Facilities (STANDATA 14-BCV-011)

Russell Croome and Bruce Schultz will review the addition information provided and will bring back any concerns at the next meeting.

[Croome / Schultz]

4.7.2. Breweries and Distilleries

Feedback was requested for the three deliverables proposed by the Working Group. It was suggested that a STANDATA may not be a reasonable solution and a better approach may be to approach the AHJs. All information will be shared with AMA. [Seward]

- MOTIONS -

1.1. Agenda Adoption

Russell Croome / Ken Roskell moved that the agenda be adopted as circulated, with a flexible order of business; CARRIED

1.2. Adoption of May 9, 2019 Minutes

Ulrik Seward / Lee Phillips moved to adopt the minutes of the May 9, 2019 meeting, as circulated; CARRIED

2.1. Vice Chair Election

After three calls and no further nominations, Bruce Schultz and Russell Croome were appointed as Vice Chairs of the Building Sub-Council, by acclamation, for a two-year term.

2.2. Matrix Review – review existing sub-council matrix to ensure it continues to appropriately represent the building discipline (end of meeting)

Keith Jansen / David Flanagan moved that the Building Sub-Council has conducted their review and no changes are being recommended to the current Building Sub-Council matrix at this time; CARRIED

2.3. Nomination of Terrance O'Flaherty to represent the Mechanical Contractors industry segment for a term ending January 31, 2023, effective February 1, 2020

Russell Croome / Ken Roskell moved to recommend to the Board the appointment of Terrance O'Flaherty to the Building Sub-Council to represent the Mechanical Contractors industry segment for a term ending January 31, 2023, effective February 1, 2020; CARRIED

2.4. Draft Terms of Reference – Joint BSC/EVSC Working Group on Using Stopped Escalators

Lee Phillips / Ulrik Seward moved to approve the Terms of Reference for the Joint Building and Elevators Sub-Councils Working Group on Using Stopped Escalators, as circulated; CARRIED

5.3. Meeting Adjournment

Russell Croome / Ken Roskell moved that the meeting be adjourned; CARRIED

- WORKING GROUPS -

WORKING GROUP	WORKING GROUP MEMBERS (Chair)			
Occupant Load Joint	<u>Cameron Bardas</u>			
Working Group (FSC)	Mike Bos, Gary Mayorchak, Stephen Suen, David Flanagan, Bruce Schultz, Corey			
	Klimchuk, Darin Sceviour			
	Industry Representative: Heath Wright			
	Municipal Affairs Support: Lance Leger, Mike Baker			
'Micro' Breweries and	Ulrik Seward, Hunter Langpap			
'Micro' Distilleries Joint	Cameron Bardas, Corey Klimchuk, Andy Smith			
Working Group (FSC)	Industry Representatives: Brad Smilie, Alberta Craft Distillers Association; Ross			
	Alger, Alberta Craft Distillers Association; Glenn Baxter, Calgary Fire Department;			
	Mohammadreza (Reza) Joodaki, Calgary Fire Department			
Using Stopped Escalators as	Corey Klimchuk, Rick Gratton, Russell Croome, JC Bawa, Stephen Weston, Lonny			
Stairs Joint Working Group	Vanderheide, Dan Theriault, Don Ireland, Salim Merchant			
(EVSC)				