

Appendix B.

Syntax Summary

Topic: Ignore

This appendix provides a syntax summary of reference items defined in the Sweeping Component. There is a separate section for each item type (Scheme extension, test harness command, etc.), and the items within each section are alphabetized. Just the syntax of each item is given; refer to the item's reference template for a complete description.

Functions

Topic: Ignore

```
outcome api_initialize_sweeping()

outcome api_offset_planar_face_loops(FACE* in_face, double
    offset_dist, BODY*& outbody, sg_gap_type gap = arc,
    AcisOptions* ao = NULL)

outcome api_pierce_sheet(BODY* big, BODY* small, FACE*& face,
    AcisOptions* ao = NULL)

outcome api_project_wire(BODY* wire_body, BODY* body, const
    SPAunit_vector& dir, double dist, AcisOptions* ao = NULL)

outcome api_rsw_face_path(FACE* sw_face, logical which_side,
    COEDGE* path, sweep_options* opts = NULL)

outcome api_rsw_face_vec(FACE* sw_face, logical which_side, const
    SPAvector& sw_vec, sweep_options* opts = NULL)

outcome api_rsw_wire_path(BODY* wire_body, COEDGE* path,
    sweep_options* opts = NULL)

outcome api_rsw_wire_path(WIRE* wire, COEDGE* path,
    sweep_options* opts = NULL)

outcome api_rsw_wire_vec(BODY* wire_body, const SPAvector&
    sw_vec, sweep_options* opts = NULL)
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outcome api_rsw_wire_vec(WIRE* wire, const SPAvector& sw_vec,
    sweep_options* opts = NULL)

outcome api_sweep_with_options(ENTITY* profile, ENTITY* path,
    sweep_options* opts, BODY*& new_body, AcisOptions* ao = NULL)

outcome api_sweep_with_options(ENTITY* profile, SPAposition root,
    SPAvector axis, sweep_options* opts, BODY*& new_body,
    AcisOptions* ao = NULL)

outcome api_sweep_with_options(ENTITY* profile, SPAvector vec,
    sweep_options* opts, BODY*& new_body, AcisOptions* ao = NULL)

outcome api_sweep_with_options(ENTITY* profile, double distance,
    sweep_options* opts, BODY*& new_body, AcisOptions* ao = NULL)

outcome api_sw_chain_axis(COEDGE* chain, SPAposition const&
    point, SPAunit_vector const& direction, double angle, int
    steps, double draft_angle, int draft_type = 2)

outcome api_sw_chain_axis(ENTITY_LIST const& chain, SPAposition
    const& point, SPAunit_vector const& direction, double angle,
    int steps, double draft_angle, int draft_type = 2)

outcome api_sw_chain_path(COEDGE* sw_chain, logical, COEDGE*
    path, double twist)

outcome api_sw_chain_path_options(COEDGE* sw_chain, COEDGE* path,
    sweep_options* swopt, sweeper* broom = NULL)

outcome api_sw_chain_surface(COEDGE* chain, COEDGE* path, surface
    const& surf, double draft_angle, int draft_type = 2)

outcome api_sw_chain_surface(ENTITY_LIST& chain, COEDGE* path,
    surface const& surf, double draft_angle, int draft_type = 2)

outcome api_sw_chain_vec(COEDGE* chain, SPAvector const&
    sweep_vector, double draft_angle, int draft_type = 2)

outcome api_sw_chain_vec(ENTITY_LIST const& chain, SPAvector
    const& sweep_vector, double draft_angle, int draft_type = 2)

outcome api_sw_chain_wire(COEDGE* chain, WIRE* wire, double
    draft_angle, int draft_type = 2)

outcome api_sw_chain_wire(ENTITY_LIST const& chain, BODY* wire,
    double draft_angle, int draft_type = 2)

outcome api_sw_face_axis(FACE* face, logical which_side,
    SPAposition const& point, SPAunit_vector const& direction,
    double angle, int steps, double draft_angle, int draft_type =
    2)

```

```

outcome api_sw_face_norm(FACE* face, logical which_side, double
    distance, double draft_angle, int draft_type = 2)

outcome api_sw_face_surface(FACE* face, logical which_side,
    COEDGE* path, surface const& surf, double draft_angle, int
    draft_type = 2)

outcome api_sw_face_vec(FACE* face, logical which_side, SPAvector
    const& sweep_vector, double draft_angle, int draft_type = 2)

outcome api_sw_face_wire(FACE* face, logical which_side, BODY*
    wire, double draft_angle, int draft_type = 2)

outcome api_sw_face_wire(FACE* face, logical which_side, WIRE*
    wire, double draft_angle, int draft_type = 2)

outcome api_sw_wire_axis_sol(BODY* body, SPAposition const&
    point, SPAunit_vector const& direction, double angle, int
    steps, double draft_angle, int draft_type = 2)

outcome api_sw_wire_axis_sol(WIRE* wire, SPAposition const&
    point, SPAunit_vector const& direction, double angle, int
    steps, double draft_angle, int draft_type = 2)

outcome api_terminate_sweeping()

logical is_SWEEP_ANNO_EDGE_LAT(const ENTITY* e)

logical is_SWEEP_ANNO_END_CAPS(const ENTITY* e)

```

Scheme Extensions

Topic:

Ignore

```

(face:offset-loops input-ent offset
    [gap-type [use-transform] [acis-opts]])

(project:wire wire body vector distance [acis-opts])

(sweep:get-path in-obj)

(sweep:get-profile in-obj)

(sweep:law profile {path | distance | vector | axis}
    [sweep-options])

(sweep:options "name-of-option"
    {value | location direction})

```