

## LIGHTWEIGHT STEEL FRAMING DETAILS **GENERAL & AXIAL LOADBEARING**









MONTREAL • TORONTO • CALGARY • EDMONTON • VANCOUVER





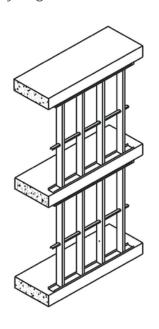


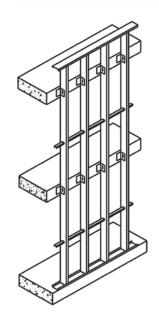




#### WALL ELEVATIONS

Bailey Wind Bearing Walls (BWB) Lightweight Steel Framing (LSF) provides economical structural support for finishes under lateral wind loads on buildings where other structural components carry axial loads. BWB walls can be designed for a variety of deflection limits for finishes such as EIFS, Stucco, Metal Panel and Brick Veneer. Wind-Bearing LSF may be used in buildings of any height.

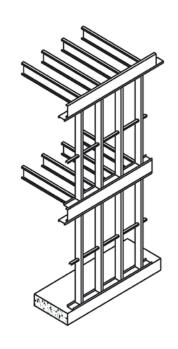




EXTERIOR INFILL WALLS / CONTINUOUS EXTERIOR CURTAIN WALLS

## **Bailey Axial Loadbearing**

Walls (BAB) Lightweight Steel Framing (LSF) supports the combined axial and wind loads on interior and exterior walls. Buildings up to six stories in height can be framed using LSF. LSF works with a variety of floors including LSF Joists, ComSlab® composite flooring systems, OWSJ's and hollow precast concrete.

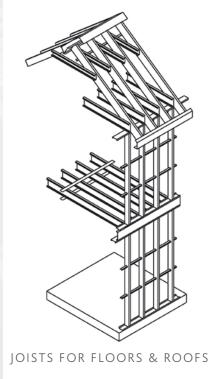


AXIAL LOAD BEARING WALLS



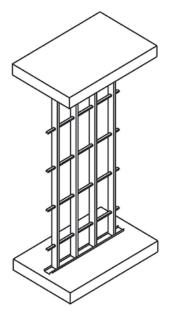
## **Bailey Joists for Floors & Roofs**

Lightweight Steel Framing (LSF) Joists offer a wide range of span and load capabilities for commercial and residential floor systems and mezzanines. LSF ceiling Joist members can also be utilized for pitched, mansard and flat roofs. The use of Bailey LSF Joist members will provide support for interior drywall ceilings where long clear spans are required.



## **Bailey Non-Loadbearing**

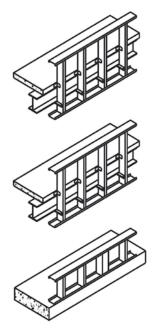
Walls (BNLB) Lightweight Steel Framing (LSF) provides an effective solution for interior non-load bearing walls and partitions. When combined with top track deflection members, bulkheads will resist buckling caused by deflection of floor and roof assemblies. Non-load bearing LSF provides a stable framework for drywall or other finished wall surface applications.



TALL INTERIOR PARTITIONS

## **Bailey Spandrel Walls**

Lightweight Steel Framing (LSF) accommodates a variety of spans for continuous strip window applications. LSF provides a stable, square platform in which glazing units and frames can be effectively installed.



SPANDREL WALLS FOR CONTINUOUS STRIP WINDOWS

The material presented in this document has been prepared for the general information of the reader. While the material is believed to be technically correct and in accordance with recognized good practice, it should not be used without first securing competent advice with respect to its suitability for any specific application. Bailey Metal Products Limited does not warrant or assume liability for the suitability of the material for any general or particular use.





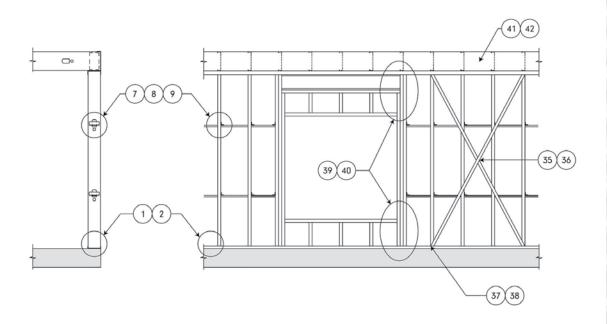




#### WALL ELEVATIONS

AXIAL LOADBEARING WALL

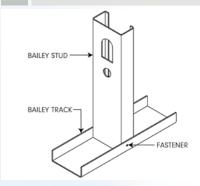
In axial loadbearing construction, some form of bracing is required to resist wind, seismic and sway effects produced by vertical loads acting on the structure (the P-delta effect). Diagonal tension straps are normally the most economical means of providing this bracing. Diagonal straps are typically installed in pairs to form the X pattern over the face of the studs. Strap end connections must be engineered to transfer the full design load and account for horizontal and vertical strap reactions.



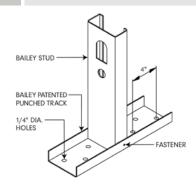


#### **GENERAL DETAILS**

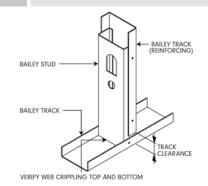
BAILEY STUD TO **BAILEY TRACK** 



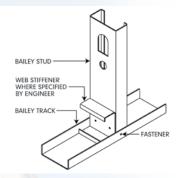
BAILEY STUD TO BAILEY PATENTED PUNCHED TRACK



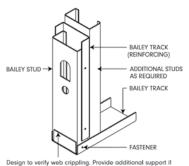
BAILEY STUD REINFORCED WITH BAILEY TRACK



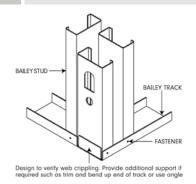
BAILEY STUD WITH WEB STIFFENER REINFORCING



IAMB STUD AT DOOR OPENING

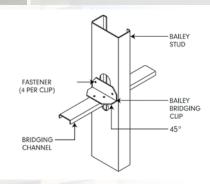


BAILEY STUD TO BAILEY TRACK AT CORNERS

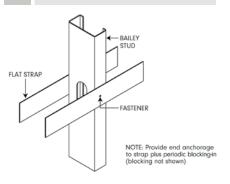


Design to verify web crippling. Provide additional support if required such as trim and bend up end of track or use angle

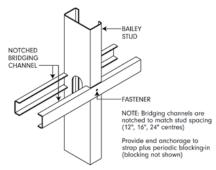
THROUGH-THE-STUD BRIDGING



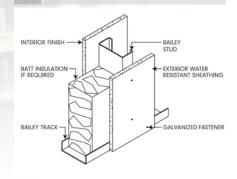
FLAT STRAP BRIDGING



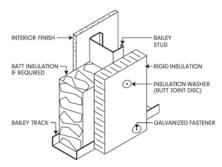
NOTCHED CHANNEL BRIDGING



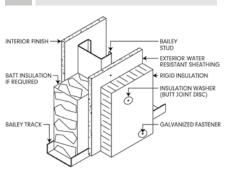
EXTERIOR SHEATHING 



EXTERIOR RIGID INSULATION



EXTERIOR SHEATHING AND RIGID INSULATION





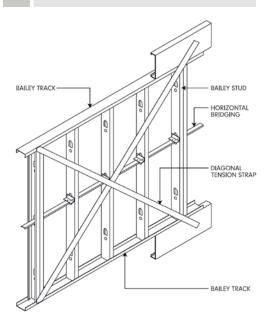






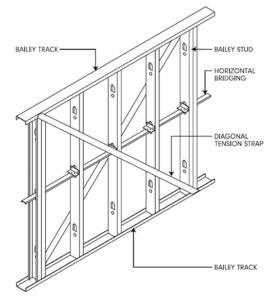
#### **AXIAL LOADBEARING WALLS**

#### DIAGONAL TENSION STRAPS ONE SIDE

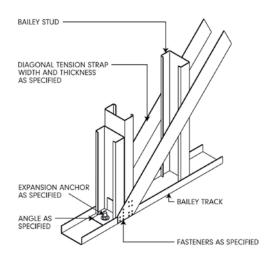




#### DIAGONAL TENSION STRAPS BOTH SIDES

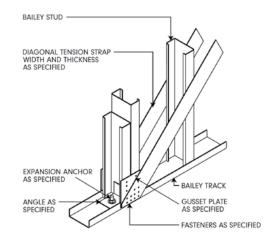


#### TENSION STRAP CONNECTION





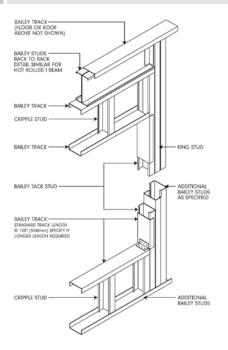
#### TENSION STRAP CONNECTION WITH GUSSET PLATES



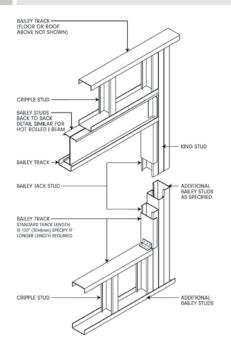


#### **AXIAL LOADBEARING WALLS**

#### WALL OPENING WITH UPPER LINTEL

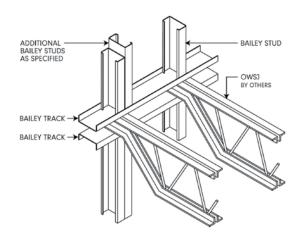


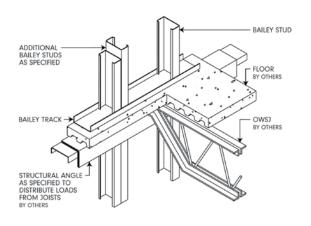
#### WALL OPENING WITH LOWER LINTEL



#### OPEN WEB STEEL JOISTS IN LINE WITH AXIAL LOADBEARING STEEL STUDS

#### OPEN WEB STEEL JOISTS OFFSET TO AXIAL LOADBEARING STEEL STUDS

















# LIGHTWEIGHT STEEL FRAMING DETAILS GENERAL & AXIAL LOADBEARING

sales@bmp-group.com • www.bmp-group.com



#### MONTREAL

525 Avenue Edward VII Dorval, QC H9P 1E7 Tel. (514) 735-3455 800-263-3455 Fax. (514) 735-5052

#### TORONTO

1 Caldari Road Concord, ON L4K 3Z9 Tel. (905) 738-9267 800-668-2154 Fax. (905) 738-5712

#### CALGARY

3924 27th Street NE Calgary, AB T1Y 5K7 Tel. (403) 248-3536 800-665-2013 Fax. (403) 248-0288

#### EDMONTON

5710 Roper Road NW Edmonton, AB T6B 3G7 Tel. (780) 462-5757 800-563-1751 Fax. (780) 450-3378

### VANCOUVER

7715 Anvil Way Surrey, BC V3W 6A2 Tel. (604) 590-5100 800-818-2666 Fax. (604) 590-5105